

Analytical Data Package Prepared For

Pacific Northwest National Lab

Radiochemical Analysis By

STL Richland STLRL

2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.

Data Package Contains _____ Pages

Report Nbr: 34621

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05099	I07-019	B1LN79	J7A200173-1	JM5M91AA	9JM5M910	7026384
		B1LNW1	J7A200176-1	JM5PC1AA	9JM5PC10	7026396
		B1LNV6	J7A200176-2	JM5PE1AA	9JM5PE10	7026396
	I07-016	B1LK81	J7A220119-1	JM6FX1AA	9JM6FX10	7026400
	W07-012	B1LJF6	J7A220134-1	JM6JQ1AC	9JM6JQ10	7026402
		B1LJF6	J7A220134-1	JM6JQ1AD	9JM6JQ10	7026396
		B1LJF6	J7A220134-1	JM6JQ2AA	9JM6JQ20	7026401
		B1LJH1	J7A220134-2	JM6J21AA	9JM6J210	7026396
		B1LJ93	J7A230123-1	JM7NK1AA	9JM7NK10	7026396
		B1LPJ8	J7A230125-1	JM7PP1AA	9JM7PP10	7026384
		B1LNM1	J7A230129-1	JM71V1AA	9JM71V10	7026384
	S07-001	B1LNM2	J7A230129-2	JM72X1AA	9JM72X10	7026384
		B1LN27	J7A230163-1	JM7311AA	9JM73110	7026400
		B1LN27	J7A230163-1	JM7311AC	9JM73110	7026396
		B1LN35	J7A230163-2	JM7381AA	9JM73810	7026385
	A07-001					

Comments:

Report Nbr: 34621

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05099	A07-001	B1LN35	J7A230163-2	JM7381AC	9JM73810	7026400
		B1LN35	J7A230163-2	JM7381AD	9JM73810	7026396
		B1LN38	J7A230163-3	JM74E1AA	9JM74E10	7026385
		B1LN38	J7A230163-3	JM74E1AC	9JM74E10	7026400
		B1LN38	J7A230163-3	JM74E1AD	9JM74E10	7026396
		B1LN42	J7A230163-4	JM7401AA	9JM74010	7026385
		B1LN42	J7A230163-4	JM7401AC	9JM74010	7026400
		B1LN42	J7A230163-4	JM7401AD	9JM74010	7026396
		B1LN42	J7A230163-4	JM7401AE	9JM74010	7026383
		B1LN43	J7A230163-5	JM7421AA	9JM74210	7026385
		B1LN43	J7A230163-5	JM7421AC	9JM74210	7026400
		B1LN43	J7A230163-5	JM7421AD	9JM74210	7026396
		B1LN43	J7A230163-5	JM7421AE	9JM74210	7026383
	W07-011	B1L6J0	J7A230259-1	JM8V01AA	9JM8V010	7026382
		B1L6D8	J7A230259-1	JM8V21AA	9JM8V210	7026382
		B1L6H6	J7A230259-1	JM8VH1AA	9JM8VH10	7026382

Comments:



STL

STL Richland
2800 George Washington Way
Richland, WA 99354

Tel: 509 375 3131 Fax: 509 375 5590
www.stl-inc.com

Certificate of Analysis

Pacific Northwest National Laboratories
Sigma V Building
Richland, WA 99352

March 8, 2007

Attention: Dot Stewart

SAF Number	:	A07-001, S07-001, W07-011, I07-021, I07-019, I07-016, W07-012
Date SDG Closed	:	January 22, 2007
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W05099
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between January 18, 2007 and January 22, 2007, twenty one water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Pacific Northwest National Laboratories (PGW) specific IDs:

<u>PGW ID#</u>	<u>STLR ID#</u>	<u>MATRIX</u>	<u>DATE OF RECEIPT</u>
B1LN79	JM5M9	WATER	1/18/07
B1LNW1	JM5PC	WATER	1/18/07
B1LNV6	JM5PE	WATER	1/18/07
B1LK81	JM6FX	WATER	1/19/07
B1LJF9	JM6JQ	WATER	1/19/07
B1LJHI	JM6J2	WATER	1/19/07
B1LJ93	JM7NK	WATER	1/22/07
B1LPJ8	JM7PP	WATER	1/22/07
B1LNM1	JM71V	WATER	1/22/07
B1LNM2	JM72X	WATER	1/22/07
B1LN27	JM731	WATER	1/22/07
B1LN35	JM738	WATER	1/22/07

B1LN38	JM74E	WATER	1/22/07
B1LN42	JM740	WATER	1/22/07
B1LN43	JM742	WATER	1/22/07
B1L6H6	JM8VH	WATER	1/23/07
B1L6J0	JM8V0	WATER	1/23/07
B1L6D8	JM8V2	WATER	1/23/07
B1LBT8	JM820	WATER	1/23/07
B1LC67	JM822	WATER	1/23/07

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014

Gross Beta by method RICH-RC-5014

Strontium-90 by method RICH-RC-5006

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017

Iodine-129 (LL) by method RICH-RC-5025

Liquid Scintillation Counting

Enriched Tritium by method RICH-RC-5024

Technetium-99 by TEVA method RICH-RC-5065

Tritium by method RICH-RC-5007

Laser Induced Phosphorimetry

Total Uranium by method RICH-RC-5058

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:

In the original batch the duplicate was out. It was rerun with good results. Except as noted, the LCS, batch blank, samples and sample duplicate (B1LJF9) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:

The sample and the duplicate have extremely high results due to high dissolved solids. Except as noted, the LCS, batch blank, samples and sample duplicate (B1LJF9) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006

The LCS, batch blank, samples and sample duplicate (B1LNM1) results are within contractual requirements.

Gamma Spectroscopy

Iodine-129 (LL) by method RICH-RC-5025:

The LCS, batch blank, samples and sample duplicate (B1LN27) results are within contractual requirements.

Liquid Scintillation Counting

Technetium-99 by TEVA method RICH-RC-5065:

The LCS, batch blank, samples, sample duplicate (B1LN35), and sample matrix spike (B1LN27) results are within contractual requirements.

Tritium by method RICH-RC-5007:

The LCS, batch blank, samples and sample duplicate (B1LN35) results are within contractual requirements.

Enriched Tritium by method RICH-RC-5024

The enriched tritium analysis was not completed at the time of reporting.

Total Uranium

Total Uranium by method RICH-RC-5058:

The LCS, batch blank, samples, sample duplicate (B1LN43), and sample matrix spike (B1LN42) results are within contractual requirements.

Chemical Analysis

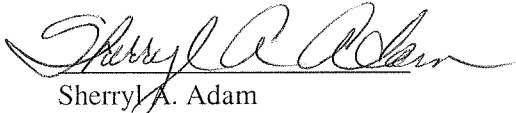
Total Coliform by method 9223

The LCS, batch blank, samples and sample duplicate (B1L6J0) results are within contractual requirements.

Pacific Northwest National Laboratories
March 8, 2007

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:



Sherryl A. Adam
Project Manager

Drinking Water Method Cross References

DRINKING WATER ASTM METHOD CROSS REFERENCES		
Referenced Method	Isotope(s)	STL Richland's SOP number
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr89/90	RICH-RC-5006
ASTM D2460	Total Radium	RICH-RC-5027
Standard Method 7500-U-C & ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007
NOTE:		
The Gross Alpha LCS is prepared with Am-241 (unless otherwise specified in the case narrative)		
The Gross Beta LCS is prepared with Sr/Y-90 (unless otherwise specified in the case narrative)		

Uncertainty Estimation

STL Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, $R = \text{constants} * f(x,y,z,...)$. The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/\sqrt{n}), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or STL Richland.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) u_c - Combined Uncertainty.	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, u_c the combined uncertainty. The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or STL Richland "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. $Lc = (1.645 * \sqrt{2 * (BkgrndCnt / BkgrndCntMin) / SCntMin}) * (ConvFct / (Eff * Yld * Abn * Vol) * IngrFct)$. For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. $MDC = (4.65 * \sqrt{(BkgrndCnt / BkgrndCntMin) / SCntMin}) + 2.71 / SCntMin * (ConvFct / (Eff * Yld * Abn * Vol) * IngrFct)$. For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the Work Order Number.
RER	The equation Replicate Error Ratio = $(S-D) / [\sqrt{TPUs^2 + TPUD^2}]$ as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUD is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by STL Richland upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

3/8/2007 9:13:25 AM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34621 File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JM5M910	B1LN79		MW6-SBB-A1	I07-019	W05099					01/18/2007 12:54				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7026384	SR-90	10098-97-2	2.14E+02	pCi/L	3.3E+00	3.1E+01		4.57E-01	72.5	SRISO_SEP_PRE	1.0035E+00	L	02/11/2007 09:25	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JM5PC10	B1LNW1		MW6-SBB-A1	S07-001	W05099					01/18/2007 12:54				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7026396	TC-99	14133-76-7	1.66E+00	pCi/L	4.0E+00	5.7E+00	U	9.65E+00	100.0	TC99_ETVDSK_LS	1.252E-01	L	02/03/2007 15:12	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JM5PE10	B1LNV6		MW6-SBB-A1	S07-001	W05099					01/18/2007 11:14				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7026396	TC-99	14133-76-7	1.09E+01	pCi/L	4.4E+00	6.3E+00		9.71E+00	100.0	TC99_ETVDSK_LS	1.263E-01	L	02/03/2007 15:12	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JM6FX10	B1LK81		MW6-SBB-A1	I07-016	W05099					01/19/2007 13:21				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7026400	I-129L	15046-84-1	1.05E-01	pCi/L	1.5E-01	1.5E-01	U	2.95E-01	100.3	I129LL_SEP_LEPS	3.9541E+00	L	02/21/2007 14:34	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JM6J210	B1LJH1		MW6-SBB-A1	W07-012	W05099					01/19/2007 10:20				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7026396	TC-99	14133-76-7	2.38E+00	pCi/L	4.1E+00	5.8E+00	U	9.69E+00	100.0	TC99_ETVDSK_LS	1.249E-01	L	02/03/2007 15:12	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JM6JQ10	B1LJF6		MW6-SBB-A1	W07-012	W05099					01/19/2007 09:09				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7026402	BETA	12587-47-2	1.07E+04	pCi/L	6.1E+01	1.4E+03		5.04E+00	100.0	9310_ALPHABETA	1.251E-01	L	02/13/2007 14:56	I
7026396	TC-99	14133-76-7	4.63E+04	pCi/L	1.2E+02	3.1E+03		9.67E+00	100.0	TC99_ETVDSK_LS	1.25E-01	L	02/03/2007 15:12	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JM6JQ20	B1LJF6		MW6-SBB-A1	W07-012	W05099					01/19/2007 09:09				

STL Richland

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

3/8/2007 9:13:26 AM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34621 File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7026401	ALPHA	12587-46-1	4.70E+00	pCi/L	1.9E+00	2.2E+00		1.86E+00	100.0	9310_ALPHABETA	1.108E-01	L	02/14/2007 11:53	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9JM71V10	B1LNM1		MW6-SBB-A1	S07-001	W05099					01/22/2007 12:53				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7026384	SR-90	10098-97-2	1.50E+01	pCi/L	8.8E-01	2.3E+00		4.37E-01	75.4	SRISO_SEP_PRE	1.0062E+00	L	02/11/2007 09:25	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9JM72X10	B1LNM2		MW6-SBB-A1	S07-001	W05099					01/22/2007 12:53				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7026384	SR-90	10098-97-2	1.50E+01	pCi/L	8.2E-01	2.3E+00		3.94E-01	79.6	SRISO_SEP_PRE	1.0051E+00	L	02/11/2007 09:20	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9JM73110	B1LN27		MW6-SBB-A1	A07-001	W05099					01/22/2007 13:25				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7026400	I-129L	15046-84-1	-6.85E-02	pCi/L	1.5E-01	1.5E-01	U	2.65E-01	97.0	I129LL_SEP_LEPS	3.9176E+00	L	02/21/2007 14:39	I
7026396	TC-99	14133-76-7	1.99E+02	pCi/L	8.6E+00	1.9E+01		9.62E+00	100.0	TC99_ETVDSK_LS	1.26E-01	L	02/03/2007 15:12	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9JM73810	B1LN35		MW6-SBB-A1	A07-001	W05099					01/22/2007 12:05				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7026385	H-3	10028-17-8	1.36E+03	pCi/L	1.7E+02	2.0E+02		2.94E+02	100.0	906.0_H3_LSC	5.00E-03	L	02/03/2007 20:32	I
7026400	I-129L	15046-84-1	-1.21E-01	pCi/L	1.4E-01	1.4E-01	U	2.24E-01	100.0	I129LL_SEP_LEPS	3.919E+00	L	02/21/2007 16:25	I
7026396	TC-99	14133-76-7	1.40E+02	pCi/L	7.5E+00	1.5E+01		9.46E+00	100.0	TC99_ETVDSK_LS	1.28E-01	L	02/03/2007 15:12	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9JM74010	B1LN42		MW6-SBB-A1	A07-001	W05099					01/22/2007 11:39				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7026385	H-3	10028-17-8	1.65E+03	pCi/L	1.8E+02	2.1E+02		2.93E+02	100.0	906.0_H3_LSC	5.00E-03	L	02/04/2007 00:37	I
7026400	I-129L	15046-84-1	-7.92E-02	pCi/L	9.8E-02	9.8E-02	U	1.61E-01	96.8	I129LL_SEP_LEPS	3.8424E+00	L	02/21/2007 16:30	I
7026396	TC-99	14133-76-7	3.43E+02	pCi/L	1.1E+01	2.9E+01		9.64E+00	100.0	TC99_ETVDSK_LS	1.25E-01	L	02/03/2007 15:12	I
7026383	Uranium	7440-61-1	2.13E+01	ug/L	2.6E+00	2.6E+00		8.25E-02		UTOT_KPA	2.54E-02	ML	02/28/2007 14:34	I

STL Richland

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

3/8/2007 9:13:26 AM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34621 File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JM74210	B1LN43		MW6-SBB-A1	A07-001	W05099					01/22/2007 08:00				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7026385	H-3	10028-17-8	3.08E+02	pCi/L	1.3E+02	1.5E+02		2.96E+02	100.0	906.0_H3_LSC	5.00E-03	L	02/04/2007 01:59	I
7026400	I-129L	15046-84-1	-7.19E-02	pCi/L	1.6E-01	1.6E-01	U	2.82E-01	97.0	I129LL_SEP_LEPS	3.8244E+00	L	02/21/2007 18:16	I
7026396	TC-99	14133-76-7	6.44E-01	pCi/L	4.0E+00	5.6E+00	U	9.60E+00	100.0	TC99_ETVDSK_LS	1.257E-01	L	02/03/2007 15:12	I
7026383	Uranium	7440-61-1	9.65E-04	ug/L	7.8E-04	7.8E-04	U	8.22E-02		UTOT_KPA	2.55E-02	ML	02/28/2007 14:38	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JM74E10	B1LN38		MW6-SBB-A1	A07-001	W05099					01/22/2007 10:44				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7026385	H-3	10028-17-8	1.70E+03	pCi/L	1.8E+02	2.1E+02		2.93E+02	100.0	906.0_H3_LSC	5.00E-03	L	02/03/2007 23:15	I
7026400	I-129L	15046-84-1	1.12E-01	pCi/L	1.5E-01	1.5E-01	U	2.96E-01	97.8	I129LL_SEP_LEPS	3.9099E+00	L	02/21/2007 16:29	I
7026396	TC-99	14133-76-7	1.12E+02	pCi/L	7.0E+00	1.3E+01		9.64E+00	100.0	TC99_ETVDSK_LS	1.25E-01	L	02/03/2007 15:12	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JM7NK10	B1LJ93		MW6-SBB-A1	W07-012	W05099					01/22/2007 10:06				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7026396	TC-99	14133-76-7	1.34E+02	pCi/L	7.4E+00	1.5E+01		9.68E+00	100.0	TC99_ETVDSK_LS	1.253E-01	L	02/03/2007 15:12	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JM7PP10	B1LPJ8		MW6-SBB-A1	I07-021	W05099					01/22/2007 13:25				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7026384	SR-90	10098-97-2	6.74E-02	pCi/L	2.0E-01	2.0E-01	U	4.26E-01	82.2	SRISO_SEP_PRE	1.0006E+00	L	02/11/2007 09:25	I

Thursday, March 08, 2007

STL Richland QC Blank Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JNG061AB

Sdg/Rept Nbr: W05099

34621

Collection Date: 01/22/2007 13:25

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 01/22/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
	MW6-SBB-A19981								AZ	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7026396	TC-99	4.49E-01	pCi/L	3.5E+00	U	6.09E+00	100.0		TC99_ETVDSK	2.021E-01	02/03/2007				D
BLK	14133-76-7			2.5E+00						L	15:12				

Thursday, March 08, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JNG081AB

Sdg/Rept Nbr: W05099

34621

Collection Date: 01/22/2007 13:25

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 01/22/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
		MW6-SBB-A19981																BB		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7026400	I-129L	-5.70E-02	pCi/L	1.3E-01	U	2.32E-01	98.1		I129LL_SEP_L	3.9978E+00	02/21/2007				D						
BLK	15046-84-1			1.3E-01						L	18:22										

Thursday, March 08, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JNG091AB

Sdg/Rept Nbr: W05099 34621

Collection Date: 01/19/2007 09:09

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 01/19/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7026401	ALPHA	-1.39E-01	pCi/L	2.3E-01	U	7.39E-01	100.0		9310_ALPHAB	2.028E-01	02/13/2007				D
BLK	12587-46-1			2.3E-01						L	15:05				

Thursday, March 08, 2007

STL Richland QC Blank Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JNG0E1AB

Sdg/Rept Nbr: W05099

34621

Collection Date: 01/22/2007 12:05

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 01/22/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BF	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7026385	H-3	5.68E+01	pCi/L	1.4E+02	U	2.94E+02	100.0		906.0_H3_LSC	5.00E-03	02/03/2007				D
BLK	10028-17-8			1.2E+02						L	15:05				

Thursday, March 08, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JNG0E1DX

Sdg/Rept Nbr: W05099

34621

Collection Date: 01/22/2007 12:05

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 01/22/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7026385	H-3	1.01E+02	pCi/L	1.4E+02	U	2.98E+02	100.0		906.0_H3_LSC	5.00E-03	02/03/2007				D
BLK	10028-17-8			1.3E+02						L	17:49				

Thursday, March 08, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JNG1A1AB

Sdg/Rept Nbr: W05099

34621

Collection Date: 01/19/2007 09:09

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 01/19/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
	MW6-SBB-A19981								BJ	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7026402	BETA	3.40E+00	pCi/L	1.5E+00		2.49E+00	100.0		9310_ALPHAB	2.003E-01	02/13/2007				D
BLK	12587-47-2			1.4E+00						L	14:56				

Thursday, March 08, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JNGX31AB

Sdg/Rept Nbr: W05099 34621

Collection Date: 01/22/2007 12:53

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 01/22/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
	MW6-SBB-A19981								BL	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7026384	SR-90	4.89E-02	pCi/L	1.9E-01	U	4.18E-01	77.8		SRISO_SEP_P	1.0004E+00	02/11/2007				D
BLK	10098-97-2			1.9E-01						L	09:20				

Thursday, March 08, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05099.Edd, h:\Reportdb\edd\Fead\I\Rad\34621.Edd

Lab Sample Id: JNGXV1AB

Sdg/Rept Nbr: W05099 34621

Collection Date: 01/22/2007 11:39

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 01/22/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BN	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ ML	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7026383	Uranium	2.30E-03	ug/L	6.6E-04	U	8.25E-02			UTOT_KPA	2.54E-02	02/28/2007				D
BLK	7440-61-1			6.6E-04						ML	14:16				

Thursday, March 08, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadI\Rad\W05099.Edd, h:\Reportdb\edd\FeadI\Rad\34621.Edd

Lab Sample Id: JNG061CS

Sdg/Rept Nbr: W05099 34621

Collection Date: 01/22/2007 13:25

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 01/22/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
	MW6-SBB-A19981								BA	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7026396	TC-99	3.25E+02	pCi/L	2.5E+01		6.00E+00	100.0	3.31E+02	TC99_ETVDSK	2.017E-01	02/03/2007			70	D
BS	14133-76-7			8.1E+00				98.0		L	15:12			130	

Thursday, March 08, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JNG081CS

Sdg/Rept Nbr: W05099 34621

Collection Date: 01/22/2007 13:25

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 01/22/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
		MW6-SBB-A19981																BC		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7026400	I-129L	7.52E+00	pCi/L	1.0E+00		3.74E-01	97.6	9.96E+00	I129LL_SEP_L	3.8701E+00	02/21/2007			70	D						
BS	15046-84-1			1.0E+00				75.5		L	18:22			130							

Thursday, March 08, 2007

STL Richland QC Control Sample Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JNG091CS

Sdg/Rept Nbr: W05099 34621

Collection Date: 01/19/2007 09:09

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 01/19/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BE	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7026401	ALPHA	2.00E+01	pCi/L	5.0E+00		6.14E-01	100.0	2.20E+01	9310_ALPHAB	2.05E-01	02/13/2007			70	D
BS	12587-46-1			2.0E+00				90.7		L	15:05			130	

Thursday, March 08, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JNG0E1CS

Sdg/Rept Nbr: W05099 34621

Collection Date: 01/22/2007 12:05

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 01/22/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
	MW6-SBB-A19981								BG	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7026385	H-3	2.63E+03	pCi/L	2.5E+02		2.94E+02	100.0	2.71E+03	906.0_H3_LSC	5.00E-03	02/03/2007			70	D
BS	10028-17-8			2.0E+02				96.9		L	16:27			130	

Thursday, March 08, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JNG0E1EM

Sdg/Rept Nbr: W05099

34621

Collection Date: 01/22/2007 12:05

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 01/22/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BI	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7026385	H-3	2.46E+03	pCi/L	2.4E+02		2.97E+02	100.0	2.71E+03	906.0_H3_LSC	5.00E-03	02/03/2007			70	D
BS	10028-17-8			2.0E+02				90.9		L	19:10			130	

Thursday, March 08, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\eddd\FeadIV\Rad\W05099.Edd, h:\Reportdb\eddd\FeadIV\Rad\34621.Edd

Lab Sample Id: JNG1A1CS

Sdg/Rept Nbr: W05099 34621

Collection Date: 01/19/2007 09:09

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 01/19/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
	MW6-SBB-A19981								BK	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7026402	BETA	2.23E+01	pCi/L	3.7E+00		2.53E+00	100.0	2.24E+01	9310_ALPHAB	2.002E-01	02/13/2007			70	D
BS	12587-47-2			2.4E+00				99.4		L	14:56			130	

Thursday, March 08, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JNGX31CS

Sdg/Rept Nbr: W05099 34621

Collection Date: 01/22/2007 12:53

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 01/22/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
	MW6-SBB-A19981								BM	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7026384	SR-90	1.41E+01	pCi/L	2.2E+00		4.75E-01	70.2	1.35E+01	SRISO_SEP_P	9.992E-01	02/11/2007			70	D
BS	10098-97-2			8.6E-01				104.5		L	09:20			130	

Thursday, March 08, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JNGXV1CS

Sdg/Rept Nbr: W05099 34621

Collection Date: 01/22/2007 11:39

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 01/22/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BO	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7026383	Uranium	3.35E+01	ug/L	4.1E+00		8.32E-02		3.54E+01	UTOT_KPA	2.52E-02	02/28/2007			70	D
BS	7440-61-1			4.1E+00				94.6		ML	14:29			130	

Thursday, March 08, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JNGXV1DS

Sdg/Rept Nbr: W05099 34621

Collection Date: 01/22/2007 11:39

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 01/22/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
		MW6-SBB-A19981																BP		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7026383	Uranium	3.69E+00	ug/L	3.8E-01		8.28E-02		3.58E+00	UTOT_KPA	2.53E-02	02/28/2007			70	D						
BS	7440-61-1			3.8E-01				103.0		ML	14:31			130							

Thursday, March 08, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JM6JQ1FR

Sdg/Rept Nbr: W05099 34621

Collection Date: 01/19/2007 09:09

Client Id: B1LJF6

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 01/19/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
W07-012	MW6-SBB-A19981								AQ	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7026402	BETA	1.06E+04	pCi/L	1.3E+03		4.75E+00	100.0		9310_ALPHAB	1.251E-01	02/13/2007	.8	0.1		D
DUP	12587-47-2	1.07E+04		6.1E+01						L	14:56	20.0	3		

Thursday, March 08, 2007

STL Richland QC Duplicate Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JM6JQ2ER

Sdg/Rept Nbr: W05099 34621

Collection Date: 01/19/2007 09:09

Client Id: B1LJF6

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 01/19/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
W07-012		MW6-SBB-A19981																AR		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7026401	ALPHA	6.79E+00	pCi/L	2.7E+00		2.27E+00	100.0		9310_ALPHAB	1.134E-01	02/14/2007	36.3	1.1		D						
DUP	12587-46-1	4.70E+00		2.2E+00						L	11:53	20.0	3								

Thursday, March 08, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JM71V1CR

Sdg/Rept Nbr: W05099 34621

Collection Date: 01/22/2007 12:53

Client Id: B1LNM1

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 01/22/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
S07-001		MW6-SBB-A19981																AS		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7026384	SR-90	1.40E+01	pCi/L	2.2E+00		3.62E-01	86.2		SRISO_SEP_P	1.0074E+00	02/11/2007	6.6	0.6		D						
DUP	10098-97-2	1.50E+01		7.7E-01						L	09:20	20.0	3								

Thursday, March 08, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JM7311ER

Sdg/Rept Nbr: W05099 34621

Collection Date: 01/22/2007 13:25

Client Id: B1LN27

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 01/22/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RType	
A07-001		MW6-SBB-A19981																AU		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7026400	I-129L	4.69E-03	pCi/L	1.4E-01	U	2.62E-01	94.9		I129LL_SEP_L	3.9024E+00	02/21/2007	0.0	0.7		D						
DUP	15046-84-1	-6.85E-02		1.4E-01						L	14:39	20.0	3								

Thursday, March 08, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JM7381ER

Sdg/Rept Nbr: W05099

34621

Collection Date: 01/22/2007 12:05

Client Id: B1LN35

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 01/22/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
A07-001	MW6-SBB-A19981								AV	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7026385	H-3	1.21E+03	pCi/L	1.9E+02		2.93E+02	100.0		906.0_H3_LSC	5.00E-03	02/03/2007	11.9	1.1		D
DUP	10028-17-8	1.36E+03		1.6E+02						L	21:54	20.0	3		

Thursday, March 08, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JM7381FR

Sdg/Rept Nbr: W05099 34621

Collection Date: 01/22/2007 12:05

Client Id: B1LN35

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 01/22/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RType	
A07-001		MW6-SBB-A19981																AW		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7026396	TC-99	1.33E+02	pCi/L	1.5E+01		9.70E+00	100.0		TC99_ETVDSK	1.249E-01	02/03/2007	5.2	0.7		D						
DUP	14133-76-7	1.40E+02		7.4E+00						L	15:12	20.0	3								

Thursday, March 08, 2007

STL Richland QC Duplicate Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JM7421FR

Sdg/Rept Nbr: W05099

34621

Collection Date: 01/22/2007 08:00

Client Id: B1LN43

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 01/22/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
A07-001		MW6-SBB-A19981																AY		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7026383	Uranium	1.98E-02	ug/L	2.2E-03	U	7.68E-02			UTOT_KPA	2.73E-02	02/28/2007	181.5	12.1		D						
DUP	7440-61-1	9.65E-04		2.2E-03						ML	15:46	20.0	3								

Thursday, March 08, 2007

STL Richland Qc Matrix Spike Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JM7311DW

Sdg/Rept Nbr: W05099

34621

Collection Date: 01/22/2007 13:25

Client Id: B1LN27

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: MS

Received Date: 01/22/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RType	
A07-001		MW6-SBB-A19981																AT		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7026396	TC-99	3.38E+03	pCi/L	2.5E+02		9.55E+00	100.0	3.57E+03	TC99_ETVDSK	1.267E-01	02/03/2007			60	D						
MS	14133-76-7			3.2E+01				94.5		L	15:12			140							

Thursday, March 08, 2007

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05099.Edd, h:\Reportdb\edd\FeadIV\Rad\34621.Edd

Lab Sample Id: JM7401FW

Sdg/Rept Nbr: W05099 34621

Collection Date: 01/22/2007 11:39

Client Id: B1LN42

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: MS

Received Date: 01/22/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
A07-001		MW6-SBB-A19981																AX		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7026383	Uranium	3.49E+01	ug/L	7.3E+00		8.45E-02		3.61E+01	UTOT_KPA	2.48E-02	02/28/2007			60	D						
MS	7440-61-1			7.3E+00				96.7		ML	14:36			140							

FormNbr	FormS	Recd	Format	Typ	Version	SampleNbr	Contract	LabCode	LabQ	Case#	SAS	SDGNbr
W	AA	H	FEAD	05	B1L6J0	MW6-SBB-A19981	STLRL					W05099
W	AB	H	FEAD	05	B1L6D8	MW6-SBB-A19981	STLRL					W05099
W	AC	H	FEAD	05	B1L6H6	MW6-SBB-A19981	STLRL					W05099
W	AD	H	FEAD	05	B1L6J0 DUP	MW6-SBB-A19981	STLRL					W05099
W	AE	H	FEAD	05	NA	MW6-SBB-A19981	STLRL					W05099
W	AF	H	FEAD	05	NA	MW6-SBB-A19981	STLRL					W05099

AnalyticalMatrix	LabReceivedDate	CollectedDate	PercentScDecante	LabSampleId	LabFileId	SafNbr
WATER	01/23/2007	01/23/2007		9JM8V010		
WATER	01/23/2007	01/23/2007		9JM8V210		
WATER	01/23/2007	01/23/2007		9JM8VH10		
WATER	01/23/2007	01/23/2007		JM8V01ER		
WATER	01/23/2007			JNGXQAB		
WATER	01/23/2007			JNGXQAC		

CollectedTime	PercentM	Filename	SpecificMa
09:51		h:\Reportdb\edd\FeadIVWet\W0509	
09:01		h:\Reportdb\edd\FeadIVWet\W0509	
10:36		h:\Reportdb\edd\FeadIVWet\W0509	
09:51		h:\Reportdb\edd\FeadIVWet\W0509	
		h:\Reportdb\edd\FeadIVWet\W0509	
		h:\Reportdb\edd\FeadIVWet\W0509	

FormNbr	FormSuffix	RecordType	CASNbr	Isotope	Result
W	AA	D	COLIFORM	COLIFORM	+1.00E+00
W	AB	D	COLIFORM	COLIFORM	+1.00E+00
W	AC	D	COLIFORM	COLIFORM	+1.00E+00
W	AD	D	COLIFORM	COLIFORM	+1.00E+00
W	AE	D	COLIFORM	COLIFORM	+1.00E+00
W	AF	D	COLIFORM	COLIFORM	+1.35E+01

OrigResult	ConcentrationU	ActionCode	AnalysisMethod	SampleAliquotS	SampleAliquotU
	Col/100ml	I	9223 COLIF0	+1.00E+02	MI
	Col/100ml	I	9223 COLIF0	+1.00E+02	MI
	Col/100ml	I	9223 COLIF0	+1.00E+02	MI
	Col/100ml	I	9223 COLIF0	+1.00E+02	MI
	Col/100ml	I	9223 COLIF0	+1.00E+02	MI
	Col/100ml	I	9223 COLIF0	+1.00E+02	MI

LabQualifier	DilutionFactor	DateAnalyzed	TimeAnalyzed	BatchNbr	QcType
U	1	01/23/2007	14:33	7026382	
U	1	01/23/2007	14:33	7026382	
U	1	01/23/2007	14:33	7026382	
U	1	01/23/2007	14:35	7026382	DIIP
U	1	01/23/2007	14:36	7026382	BLK
U	1	01/23/2007	14:36	7026382	BS

SpikeConc	PercentRecover	Rpd	RpdMaximum	Rpd_UCL	LCSMS_LCL
		0			

LCS_UCL	TracerYield	DetectionLimit	RL	RLType	CommentCode
		1.00E+00	1.00E+00	BDI	
		1.00E+00	1.00E+00	BDI	
		1.00E+00	1.00E+00	BDI	
		1.00E+00	1.00E+00	BDI	
		1.00E+00	1.00E+00	BDI	
		1.00E+00	1.00E+00	BDI	

Lot No., Due Date: J7A220134; 03/05/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7026401; RALPHA-A Alpha by GPC-Am
SDG, Matrix: W05099; WATER

8.0	Correction Calculation Protocol Used. OK	Yes	No	N/A
8.01	The Appropriate Methods Were Used To Analyze the Samples OK	Yes	No	N/A
8.02	Final Results Are in the Appropriate Activity Units OK	Yes	No	N/A
8.03	Batch Contains the Required QC Appropriate for the Method OK	Yes	No	N/A
8.04	The Correct Tracer and QC Vials Where Used in the Samples OK	Yes	No	N/A
8.05	Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes	No	N/A
8.06	At Least the Minimum Sample Volume Was Used Analysis Volume => JM6JQ1AA 110.80<200.00 JM6JQ2AA 110.80<200.00 Q:VB	Yes	No	N/A
8.07	The Correct Count Geometry was Used. OK	Yes	No	N/A
8.08	The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	Yes	No	N/A
8.09	Method Blank is within Control Limits. OK	Yes	No	N/A
8.1	Comments:			
8.11	Matrix Blank is within Control Limits. No Matrix Blanks (MBIks) found in Batch!	Yes	No	N/A
8.12	Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13	QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> JM6JQ1AE ALPHA 53.0 JM6JQ2AE ALPHA 44.0 (RPD)	Yes	No	N/A
8.14	LCS within Control Limits. OK	Yes	No	N/A
8.15	MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16	MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	Yes	No	N/A
8.17	Tracer within Control Limits. OK	Yes	No	N/A
8.18	Samples are above Minimum Tracer Yield (No Failed Samples) OK	Yes	No	N/A
8.19	Sample Specific MDC <= CRDL. OK	Yes	No	N/A
8.2	Comments:			
8.21	Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22	Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JM6JQ1AA ALPHA 4.3E+00 L:2.1E+00 JM6JQ2AA ALPHA 4.7E+00 L:1.9E+00	Yes	No	N/A
8.23	Result <= Action Level, when Defined. OK; No Action Level Found => ALPHA OK; No Callin Level Found => ALPHA	Yes	No	N/A
8.24	Result + 3s >=0, Not Too Negative. OK	Yes	No	N/A

- 8.25 Counting Spectrum are within FWHM Limits.
No FWHM found in Batch Data! Yes No ☒ N/A
- 8.26 Instruments have Current Calibrations. Yes No ☒ N/A
- 8.27 Correct Count Library Used.
No Count Library found in Batch Data! Yes No ☒ N/A
- 8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No ☒ N/A
- 8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No ☒ N/A
- 8.3 Comments:
- 8.31 Results Blank Subtracted as Appropriate.
OK Yes No ☒ N/A

First Level Review

Pam Anderson

Date *2-14-07*



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7026401

W05099

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?	✓		
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?	✓		
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

See NCM

Second Level Review:

Sheryl A. Adams

Date:

2-10-07

Clouseau Nonconformance Memo

SEVERN
TRENT
SERVICES

NCM #: **10-09446**
NCM Initiated By: Pam Anderson
Date Opened: 02/14/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Sep
Tests: Alpha by GPC-Am
Lot #'s (Sample #'s): J7A220134 (1),
QC Batches: 7026401

Nonconformance: Other (describe in detail)
Subcategory: Other (explanation required)

Problem Description / Root Cause

<u>Name</u>	<u>Date</u>	<u>Description</u>
Pam Anderson	02/14/2007	The duplicate in this alpha in water batch was out. A recount brings the sample and duplicate in agreement.

Corrective Action

<u>Name</u>	<u>Date</u>	<u>Corrective Action</u>
Pam Anderson	02/14/2007	The sample and duplicate were recounted.

Client Notification Summary

<u>Client</u>	<u>Project Manager</u>	<u>Notified</u>	<u>Response</u>	<u>How Notified</u>	<u>Note</u>
			<u>Response</u>		<u>Response Note</u>

Quality Assurance Verification

<u>Verified By</u>	<u>Due Date</u>	<u>Status</u>	<u>Notes</u>
			This section not yet completed by QA.

Approval History

<u>Date Approved</u>	<u>Approved By</u>	<u>Position</u>
----------------------	--------------------	-----------------

Lot No., Due Date: J7A220134; 03/05/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7026402; RBETA-SR Beta by GPC-Sr/Y
SDG, Matrix: W05099; WATER

8.0	Correction Calculation Protocol Used. OK	Yes	No	N/A
8.01	The Appropriate Methods Were Used To Analyze the Samples OK	Yes	No	N/A
8.02	Final Results Are in the Appropriate Activity Units OK	Yes	No	N/A
8.03	Batch Contains the Required QC Appropriate for the Method OK	Yes	No	N/A
8.04	The Correct Tracer and QC Vials Where Used in the Samples OK	Yes	No	N/A
8.05	Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes	No	N/A
8.06	At Least the Minimum Sample Volume Was Used Analysis Volume => JM6JQ1AC 125.10<200.00 Q:VB	Yes	No	N/A
8.07	The Correct Count Geometry was Used. OK	Yes	No	N/A
8.08	The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	Yes	No	N/A
8.09	Method Blank is within Control Limits. OK	Yes	No	N/A
8.1	Comments:			
8.11	Matrix Blank is within Control Limits. No Matrix Blanks (MBIs) found in Batch!	Yes	No	N/A
8.12	Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13	QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	Yes	No	N/A
8.14	LCS within Control Limits. OK	Yes	No	N/A
8.15	MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16	MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	Yes	No	N/A
8.17	Tracer within Control Limits. OK	Yes	No	N/A
8.18	Samples are above Minimum Tracer Yield (No Failed Samples) OK	Yes	No	N/A
8.19	Sample Specific MDC <= CRDL. MDC/MDA > CRDL => JM6JQ1AC BETA 5.0E+00>4.0E+00 JM6JQ1AF BETA 4.8E+00>4.0E+00 Q:C1	Yes	No	N/A
8.2	Comments:			
8.21	Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22	Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JM6JQ1AC BETA 1.1E+04 L:5.0E+00	Yes	No	N/A
8.23	Result <= Action Level, when Defined. OK; No Action Level Found => BETA OK; No Callin Level Found => BETA	Yes	No	N/A
8.24	Result + 3s >=0, Not Too Negative. OK	Yes	No	N/A
8.25	Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A

8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A <input checked="" type="checkbox"/>
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes <input checked="" type="checkbox"/>	No	N/A

First Level Review

Pam Anderson

Date

2-14-07



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7026402
W05099

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?	✓		
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?	✓		
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

See NCR

Second Level Review:

Sheryl A. Allen

Date: 2-20-07

Clouseau Nonconformance Memo

SEVERN
TRENT
SERVICES

NCM #: **10-09445**

NCM Initiated By: Pam Anderson

Date Opened: 02/14/2007

Date Closed:

Classification: **Anomaly**

Status: **GLREVIEW**

Production Area: Environmental - Sep

Tests: Beta by GPC-Sr/Y

Lot #'s (Sample #'s): J7A220134 (1), J7A260000
(402),

QC Batches: 7026402

Nonconformance: Blank result above Contract Limit

Subcategory: Matrix effect

Problem Description / Root Cause

<u>Name</u>	<u>Date</u>	<u>Description</u>
Pam Anderson	02/14/2007	The blank in this beta batch of water is above 1/2 CRDL but below CRDL. The sample and duplicate in the batch have extremely high results, to the fourth power. Data will be accepted.

Corrective Action

<u>Name</u>	<u>Date</u>	<u>Corrective Action</u>
Pam Anderson	02/14/2007	None at this time.

Client Notification Summary

<u>Client</u>	<u>Project Manager</u>	<u>Notified</u>	<u>Response</u>	<u>How Notified</u>	<u>Note</u>
	<u>Response</u>	<u>Response Note</u>			

Quality Assurance Verification

<u>Verified By</u>	<u>Due Date</u>	<u>Status</u>	<u>Notes</u>
		This section not yet completed by QA.	

Approval History

<u>Date Approved</u>	<u>Approved By</u>	<u>Position</u>
----------------------	--------------------	-----------------

Lot No., Due Date: J7A200173,J7A230129,J7A230125; 03/05/2007,03/08/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7026384; RSR85907 Sr-85/90 by GPC-7
SDG, Matrix: W05099; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes No N/A

4.2 Were analysis volumes entered correctly? Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A

5.2 Are all required forms filled out? Yes No N/A

5.3 Was the correct methodology used? Yes No N/A

5.4 Was transcription checked? Yes No N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

5.6 Are worksheet entries complete and correct? Yes No N/A

6.0 Comments on any No response:

First Level Review



Date

2-12-07



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7026384
W09099

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review

Sheryl A. Adams

Date: 2-12-07

Lot No., Due Date: J7A220119,J7A230163; 03/05/2007,03/08/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7026400; RGAMLEPS Gamma by LEPS

SDG, Matrix: W05099; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes No N/A

4.2 Were analysis volumes entered correctly? Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A

5.2 Are all required forms filled out? Yes No N/A

5.3 Was the correct methodology used? Yes No N/A

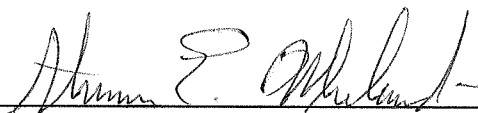
5.4 Was transcription checked? Yes No N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

5.6 Are worksheet entries complete and correct? Yes No N/A

6.0 Comments on any No response:

First Level Review



Date

2/22/07



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7026400
W05099

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		✓
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

3A1
2-23-07

Comments on any "No" response:

Second Level Review:

Therese A. Adams

Date:

2-23-07

Lot No., Due Date: J7A200176,J7A220134,J7A230163,J7A230123; 03/05/2007,03/08/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7026396; RTC99 Tc-99 by LSC

SDG, Matrix: W05099; WATER

8.0 Correction Calculation Protocol Used. OK	Yes	No	N/A
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	Yes	No	N/A
8.02 Final Results Are in the Appropriate Activity Units OK	Yes	No	N/A
8.03 Batch Contains the Required QC Appropriate for the Method OK	Yes	No	N/A
8.04 The Correct Tracer and QC Vials Where Used in the Samples Incorrect Tracer/Vial => JM7311AD TCSG<>TCSE Q:V9	Yes	No	N/A
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes	No	N/A
8.06 At Least the Minimum Sample Volume Was Used OK	Yes	No	N/A
8.07 The Correct Count Geometry was Used. OK	Yes	No	N/A
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	Yes	No	N/A
8.09 Method Blank is within Control Limits. OK	Yes	No	N/A
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBIs) found in Batch!	Yes	No	N/A
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	Yes	No	N/A
8.14 LCS within Control Limits. OK	Yes	No	N/A
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16 MS within Control Limits. OK	Yes	No	N/A
8.17 Tracer within Control Limits. No Tracers found in Batch!	Yes	No	N/A
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!	Yes	No	N/A
8.19 Sample Specific MDC <= CRDL. OK	Yes	No	N/A
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	Yes	No	N/A
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => TC-99 OK; No Callin Level Found => TC-99	Yes	No	N/A
8.24 Result + 3s >=0, Not Too Negative. OK	Yes	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A

8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes	No	N/A

First Level Review

Pam Anderson

Date

2-5-07



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7026396
W05099

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

Sheryl A Adams

Date:

2-6-07

Lot No., Due Date: J7A230163; 03/08/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7026385; RTRITIUM H-3 by LSC
SDG, Matrix: W05099; WATER

8.0	Correction Calculation Protocol Used. OK	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
8.01	The Appropriate Methods Were Used To Analyze the Samples OK	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
8.02	Final Results Are in the Appropriate Activity Units OK	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
8.03	Batch Contains the Required QC Appropriate for the Method OK	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
8.04	The Correct Tracer and QC Vials Where Used in the Samples OK	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
8.05	Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
8.06	At Least the Minimum Sample Volume Was Used Analysis Volume => JM7381AA 5.00<10.00 JM74E1AA 5.00<10.00 JM7401AA 5.00<10.00 JM7421AA 5.00<10.00 Q:VB <i>OK AL 2/7/07</i>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
8.07	The Correct Count Geometry was Used. Count Geometry => JNG0E1AF SVP15/5<>SVP10/10 JNG0E1AG SVP15/5<>SVP10/10 JNG0E1AA SVP15/5<>SVP10/10 JNG0E1AC SVP15/5<>SVP10/10 JNG0E1AD SVP15/5<>SVP10/10 JNG0E1AE SVP15/5<>SVP10/10 JM7381AA SVP15/5<>SVP10/10 JM7381AE SVP15/5<>SVP10/10 JM74E1AA SVP15/5<>SVP10/10 JM7401AA SVP15/5<>SVP10/10 JM7421AA SVP15/5<>SVP10/10 Q:VC <i>OK AL 2/7/07</i>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
8.08	The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
8.09	Method Blank is within Control Limits. OK	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
8.1	Comments:			
8.11	Matrix Blank is within Control Limits. OK	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
8.12	Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
8.13	QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
8.14	LCS within Control Limits. OK	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
8.15	MLCS within Control Limits. OK	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
8.16	MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
8.17	Tracer within Control Limits. No Tracers found in Batch!	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
8.18	Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
8.19	Sample Specific MDC <= CRDL. OK	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
8.2	Comments:			
8.21	Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>

8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => H-3 OK; No Callin Level Found => H-3	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
8.24 Result + 3s >=0, Not Too Negative. OK	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
8.26 Instruments have Current Calibrations.	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
8.3 Comments:	
8.31 Results Blank Subtracted as Appropriate. OK	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

First Level Review

Angela Tong
2/7/07

Date 2-7-07

STL Richland

QAS_RADCALCv4.8.26

Pam Anderson



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7026385
W05099

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review

Sheryl R Adams

Date: 2-7-07

Lot No., Due Date: J7A230163; 03/08/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7026383; RUNAT UNat by KPA
SDG, Matrix: W05099; WATER

1.0 COC

1.1 Is the ICCOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? ☒ Yes ☐ No ☐ N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? ☒ Yes ☐ No ☐ N/A

2.2 Are the QC appropriate for the analysis included in the batch? ☒ Yes ☐ No ☐ N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? ☒ Yes ☐ No ☐ N/A

2.4 Do the Worksheets include a Tracer Vial label for each sample? ☒ Yes ☐ No ☐ N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? ☒ Yes ☐ No ☐ N/A

3.2 Is the LC/MS result, yield, and MDA within contract limits? ☒ Yes ☐ No ☐ N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? ☒ Yes ☐ No ☐ N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? ☒ Yes ☐ No ☐ N/A

3.5 Are the sample yields and MDAs within contract limits? ☒ Yes ☐ No ☐ N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? ☒ Yes ☐ No ☐ N/A

4.2 Were analysis volumes entered correctly? ☒ Yes ☐ No ☐ N/A

4.3 Were Yields entered correctly? ☒ Yes ☐ No ☐ N/A

4.4 Were spectra reviewed/meet contractual requirements? ☒ Yes ☐ No ☐ N/A

4.5 Were raw counts reviewed for anomalies? ☒ Yes ☐ No ☐ N/A

5.0 Other

5.1 Are all nonconformances included and noted? ☒ Yes ☐ No ☐ N/A

5.2 Are all required forms filled out? ☒ Yes ☐ No ☐ N/A

5.3 Was the correct methodology used? ☒ Yes ☐ No ☐ N/A

5.4 Was transcription checked? ☒ Yes ☐ No ☐ N/A

5.5 Were all calculations checked at a minimum frequency? ☒ Yes ☐ No ☐ N/A

5.6 Are worksheet entries complete and correct? ☒ Yes ☐ No ☐ N/A

6.0 Comments on any No response:

First Level Review

Date 2/28/07



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7026383
W05099

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?	✓		
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

Sheryl A. Adam

Date: 3-1-07

Work Order Number(s): JM8VH, JM8V0, JM8V2, JNGXQ				
Lab Sample Numbers or SDG: W05099				
Method/Test/Parameter: Coliform				
Review Item	Yes (✓)	No (✓)	N/A (✓)	2 nd Level Review (✓)
A. Initial Calibration			✓	
1. Performed at required frequency with required number of levels?				
2. Correlation coefficient within QC limits?			✓	
3. Initial calibration verification (ICV) analyzed immediately after calibration and results within QC limits?			✓	
4. Initial calibration blank (ICB) analyzed immediately after ICV and concentrations of all parameters \leq reporting limit?			✓	
B. Continuing Calibration			✓	
1. CCV analyzed at required frequency and all parameters within QC limits?				
2. CCB analyzed at required frequency and all results \leq reporting limit?			✓	
C. Sample Analysis	✓			
1. Were any samples with concentrations above the linear range for any parameter diluted and reanalyzed?				
2. Were all sample holding times met?	✓			
D. QC Samples	✓			
1. All results for the preparation blank below limits?				
2. MS or MS/MSD recoveries within QC limits and %RPD (for MSD) acceptable?			✓	
3. LCS percent recovery within QC limits and %RPD (for LCSD) acceptable?	✓			
4. Analytical spikes within QC limits where applicable?			✓	
5. ICP only: One serial dilution performed per SDG?			✓	
6. ICP only: CRDL standard (CRI or CRA) analyzed at required frequency?			✓	
7. ICP only: Interference check samples (ICSA, ICSAB) and HICAL analyzed at the required frequencies and within QC limits?			✓	

PNNL J7A200173 W05099 due 03-05-07						CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST								C.O.C. # I07-019-10	
						Page 1 of 1									
Collector Fluor Hanford F.M. HALL				Contact/Requester Dot Stewart				Telephone No. MSIN FAX 509-376-5056							
SAF No. I07-019				Sampling Origin Hanford Site				Purchase Order/Charge Code							
Project Title 100KR4IAM(1/2)-LOI JANUARY 2007				Logbook: HNF-N-506-Z				Ice Chest No. AFS-04-005 Temp.							
Shipped To (Lab) Severn Trent Incorporated, Richland				Method of Shipment Govt. Vehicle				Bill of Lading/Air Bill No.							
Protocol CERCLA				Priority: 45 Days				Offsite Property No.							
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)						SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.									
Sample No.		Lab ID		*	Date	Time	No/Type Container	Sample Analysis						Preservative	
B1LN79				W	1/18/07	1254	1x20-mL P	Activity Scan						None	
B1LN79				W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)						HNO3 to pH <2	
<div style="text-align: center;">Jm5m9</div> <div style="position: relative;"><div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); font-size: 2em;">f. wall</div><div style="position: absolute; bottom: 10%; right: 10%;">1/18/07</div></div>															
Relinquished By Fluor Hanford F.M. HALL				Print Sign		Date/Time JAN 18 2007		Received By S. Smith S. Smith				Print Sign Date/Time JAN 18 2007		Matrix * S = Soil DS = Drum Solid SE = Sediment DI = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other	
Relinquished By				Date/Time		Received By		Date/Time							
Relinquished By				Date/Time		Received By		Date/Time							
Relinquished By				Date/Time		Received By		Date/Time							
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)										Disposed By		Date/Time	



STL

Sample Check-in List

Date/Time Received: 01-18-07 1510

Client: P6W SDG #: W05099 NA () SAF #: I07-019 NA ()

Work Order Number: J7A200173

Chain of Custody # I07-019-10

Shipping Container ID: _____

Air Bill # _____

1. Custody Seals on shipping container intact? NA () Yes (☒) No ()
2. Custody Seals dated and signed? NA () Yes (☒) No ()
3. Chain of Custody record present? Yes (☒) No ()
4. Cooler temperature: _____ NA (☒) S. Vermiculite/packing materials is NA (☒) Wet () Dry ()
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA (☒) Yes () No ()
8. Samples have:
____ tape
____ custody seals
____ hazard labels
____ appropriate samples labels
9. Samples are:
____ in good condition
____ broken
____ leaking.
____ have air bubbles
(Only for samples requiring head space)
10. Sample pH taken? NA () pH < 2 (☒) pH > 2 () pH > 9 ()
11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed. Yes (☒) No ()
12. Were any anomalies identified in sample receipt? Yes () No (☒)
13. Description of anomalies (include sample numbers): _____

Sample Custodian: S. Sm. Vh Date: 01-18-07 1510

Client Sample ID	Analysis Requested	Condition	Comments/Action


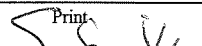
Client Informed on _____ by _____ Person contacted _____

() No action necessary; process as is.

Project Manager _____ Date _____

PNNL <i>J7A200176</i> <i>WD5099</i> <i>Due 03-05-07</i> Fluor Hanford		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # S07-001-92
				Page <u>1</u> of <u>1</u>
Collector F. M. HALL	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN FAX	
SAF No. S07-001	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title SURV. JANUARY 2007	Logbook: <i>HNF-N-506-2</i>	Ice Chest No. <i>AFS-01-005</i>	Temp.	
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol SURV	Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		
		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

[illegible]

Relinquished By Fluor Hanford E.M. HALL	Print 	Sign	Date/Time JAN 18 2007	Received By S. Smith	Print 	Sign	Date/Time JAN 18 2007	1510	Matrix *
Relinquished By	Date/Time	Received By	Date/Time					S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air	DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine L = Liquid V = Vegetation X = Other
Relinquished By	Date/Time	Received By	Date/Time						
Relinquished By	Date/Time	Received By	Date/Time						
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By			Date/Time		

PNNL 77A200176 W05099 Due 03.05.07		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				C.O.C. # S07-001-82					
Collector Fluor Hanford E.M. HALL		Contact/Requester Dot Stewart		Telephone No. 509-376-5056		MSIN FAX					
SAF No. S07-001		Sampling Origin Hanford Site		Purchase Order/Charge Code							
Project Title SURV. JANUARY 2007		Logbook: HNF-N-506-2		Ice Chest No. AFS-04-05		Temp.					
Shipped To (Lab) Severn Trent Incorporated, Richland		Method of Shipment Govt. Vehicle		Bill of Lading/Air Bill No.							
Protocol SURV		Priority: 45 Days		Offsite Property No.							
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)				SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.							
Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis		Preservative			
B1LNV6		W	1/18/07	1114	1x20-mL P	Activity Scan		None			
B1LNV6		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)		HCl to pH <2			
<div>TM5PE</div> <div>1/18/07</div>											
Relinquished By Fluor Hanford E.M. HALL		Print 	Sign 	Date/Time JAN 18 2007	Received By S. Smith		Print 	Sign 	Date/Time JAN 18 2007	Matrix *	
Relinquished By		Date/Time		Received By		Date/Time		S = Soil SF = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air		DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine L = Liquid V = Vegetation X = Other	
Relinquished By		Date/Time		Received By		Date/Time					
Relinquished By		Date/Time		Received By		Date/Time					
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By		Date/Time			



STL

Sample Check-in List

Date/Time Received: 07-18-07 1510

Client: P6W

SDG #: W05099

NA ☐

SAF #: 507-001

NA ☐

Work Order Number: J7A200176

Chain of Custody # 507-001-92, 82

Shipping Container ID: _____

Air Bill # _____

1. Custody Seals on shipping container intact?

NA ☐ Yes ☒ No ☐

2. Custody Seals dated and signed?

NA ☐ Yes ☒ No ☐

3. Chain of Custody record present?

Yes ☒ No ☐

4. Cooler temperature: _____ NA ☒

5. Vermiculite/packing materials is NA ☒ Wet ☐ Dry ☐

6. Number of samples in shipping container: 2

7. Sample holding times exceeded?

NA ☒ Yes ☐ No ☐

8. Samples have:

_____ tape

_____ custody seals

_____ hazard labels

☒ appropriate samples labels

9. Samples are:

☒ in good condition

_____ broken

_____ leaking

_____ have air bubbles

(Only for samples requiring head space)

10. Sample pH taken?

NA ☐

pH < 2 ☒

pH > 2 ☐

pH > 9 ☐

11. Sample Location, Sample Collector Listed? *

*For documentation only. No corrective action needed.

Yes ☒ No ☐

12. Were any anomalies identified in sample receipt?

Yes ☐ No ☒

13. Description of anomalies (include sample numbers): _____

Sample Custodian: A. Smith

Date: 07-18-07 1510

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

[illegible]



STL

Sample Check-in List

Date/Time Received: 1/19/07 1350Client: PNLSDG #: W05099NA ☐SAF #: I07-016NA ☐Work Order Number: J7A220119Chain of Custody #: I07-016-2

Shipping Container ID: _____

Air Bill #: _____

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet ☐ Dry ☐
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA ☒ Yes ☐ No ☐
8. Samples have:
____ tape
____ custody seals
____ hazard labels
____ appropriate samples labels
9. Samples are:
____ in good condition
____ broken
____ leaking
____ have air bubbles
(Only for samples requiring head space)
10. Sample pH taken? NA ☐ pH < 2 ☒ pH > 2 ☐ pH > 9 ☐
11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed. Yes ☒ No ☐
12. Were any anomalies identified in sample receipt? Yes ☐ No ☒
13. Description of anomalies (include sample numbers): _____

Sample Custodian: Erin DwyerDate: 1/19/07 1350

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

☐ No action necessary; process as is.

Project Manager: _____ Date: _____

[illegible]

PNNL <i>577220134</i> <i>W05099</i> <i>Due 03-05-07</i>		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # W07-012-428
				Page <u>1</u> of <u>1</u>
Collector Fluor Hanford F.M. HALL	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
SAF No. W07-012	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title RCRA DECEMBER 2006	<i>HNF-N-506-2</i>	Ice Chest No. <i>ERCFS-001</i>	Temp.	
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol RCRA	Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		

Collector Fluor Hanford F.M. HALL	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
SAF No. W07-012	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title RCRA, DECEMBER 2006	HNF-N-506-2		Ice Chest No. ERC-FS-001	Temp.
Shipped To (Lab) Sewer Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol RCRA	Priority: 45 Days		Offsite Property No.	

[illegible]

Relinquished By Fluor Hanford E.M. HALL	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time JAN 19 2007	Received By <i>ERIC DORLEY</i>	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time 1-19-07	Matrix *	
Relinquished By	Date/Time	Received By	Date/Time					S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air	DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine L = Liquid V = Vegetation X = Other
Relinquished By	Date/Time	Received By	Date/Time						
Relinquished By	Date/Time	Received By	Date/Time						
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By		Date/Time		



STL

Sample Check-in List

Date/Time Received: 1/19/07 1350Client: PNWSDG #: W05099 NA ☐ SAF #: W07-012 NA ☐Work Order Number: 07A220134Chain of Custody # W07-012-420,428

Shipping Container ID: _____

Air Bill # _____

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet ☐ Dry ☐
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA ☒ Yes ☐ No ☐
8. Samples have:
____ tape
____ custody seals
____ hazard labels
____ appropriate samples labels
9. Samples are:
____ in good condition
____ broken
____ leaking
____ have air bubbles
(Only for samples requiring head space)
10. Sample pH taken? NA ☐ pH < 2 ☒ pH > 2 ☐ pH > 9 ☐
11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed. Yes ☒ No ☐
12. Were any anomalies identified in sample receipt? Yes ☐ No ☒
13. Description of anomalies (include sample numbers): _____

Sample Custodian: Ken DarbyDate: 1/19/07 1350

Client Sample ID	Analysis Requested	Condition	Comments/Action

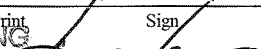

Client Informed on _____ by _____ Person contacted _____

☐ No action necessary; process as is.

Project Manager _____ Date _____

PNNL <i>J7A230123</i> <i>W05099</i> <i>Due 03/08/07</i>		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # W07-012-334
				Page <u>1</u> of <u>1</u>
Collector K. J. YOUNG	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
SAF No. W07-012	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title RCRA, DECEMBER 2006	Method of Shipment <i>HNF - N - 506 - 1 p. 46</i>	Ice Chest No. <i>ROES</i>	Temp.	
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol RCRA	Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		

[illegible]

Relinquished By	Print K. J. YOUNG	Sign 	Date/Time 01-22-2007	Received By	Print ERIC D. DUBOIS	Sign 	Date/Time 1-22-07 1510	Matrix *	
Relinquished By			Date/Time	Received By			Date/Time	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air	DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine L = Liquid V = Vegetation X = Other
Relinquished By			Date/Time	Received By			Date/Time		
Relinquished By			Date/Time	Received By			Date/Time		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time



STL

Sample Check-in List

Date/Time Received: 11/22/07 1510

Client: PNL

SDG #: W05099

NA ()

SAF #: W07-012

NA ()

Work Order Number: J7A230123

Chain of Custody # W07-012-334

Shipping Container ID: _____

Air Bill # _____

1. Custody Seals on shipping container intact? NA () Yes (☒) No ()
2. Custody Seals dated and signed? NA () Yes (☒) No ()
3. Chain of Custody record present? Yes (☒) No ()
4. Cooler temperature: _____ NA (☒) 5. Vermiculite/packing materials is NA (☒) Wet () Dry ()
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? 1x 500mL NA (☒) Yes () No ()
8. Samples have:
____ tape
____ custody seals
____ hazard labels
____ appropriate samples labels
9. Samples are:
____ in good condition
____ broken
____ leaking
____ have air bubbles
(Only for samples requiring head space)
10. Sample pH taken? NA () pH < 2 (☒) pH > 2 () pH > 9 ()
11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed. Yes (☒) No ()
12. Were any anomalies identified in sample receipt? Yes () No (☒)
13. Description of anomalies (include sample numbers): _____

Sample Custodian: Erin Daby

Date: 11/22/07 1510

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

() No action necessary; process as is.

Project Manager _____

Date _____

PNNL <i>J7A230125</i> <i>W05099</i> <i>Due 03-08-07</i>		<h2 style="margin:0;">CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</h2>		C.O.C. # <div style="text-align: center; font-size: 1.2em; font-weight: bold;">107-021-10</div>	
				Page <u>1</u> of <u>1</u>	
Collector <i>Fluor Hanford</i> SAF No. <i>D. E. PARCHEN</i> <i>107-021</i>		Contact/Requester <i>Dot Stewart</i>		Telephone No. <i>509-376-5056</i> MSIN FAX	
Project Title <i>2ZPI-LOL JANUARY 2007</i>		Sampling Origin <i>Hanford Site</i>		Purchase Order/Charge Code	
Shipped To (Lab) <i>Severn Trent Incorporated, Richland</i>		Method of Shipment <i>Govt. Vehicle</i>		Ice Chest No. <i>C-4</i> Temp.	
Protocol <i>CERCLA</i>		Priority: 45 Days		Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)			SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LPJ8		W	<i>1-22-7</i>	<i>1325</i>	1x20-mL P	Activity Scan	None
B1LPJ8		W	<i>↓</i>	<i>↓</i>	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

Relinquished By <i>Fluor Hanford</i> <i>D. E. PARCHEN</i>	Print 	Sign 	Date/Time <i>1510</i> <i>JAN 22 2007</i>	Received By <i>ERIC DARGY</i>	Print 	Sign 	Date/Time <i>1510</i> <i>JAN 22 2007</i>	Matrix * S = Soil DS = Drum Solid SF = Sediment DI = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By	Date/Time	Received By	Date/Time					
Relinquished By	Date/Time	Received By	Date/Time					
Relinquished By	Date/Time	Received By	Date/Time					
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By		Date/Time



STL

Sample Check-in List

Date/Time Received: 11/22/07 1510

Client: PNL

SDG #: W05099

NA ☐

SAF #:

I07-021

NA ☐

Work Order Number: J7A230125

Chain of Custody #

I07-021-10

Shipping Container ID: _____

Air Bill # _____

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet ☐ Dry ☐
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? 3x NA ☒ Yes ☐ No ☐
8. Samples have:
____ tape
____ custody seals
____ hazard labels
____ appropriate samples labels
9. Samples are:
____ in good condition
____ broken
____ leaking
____ have air bubbles
(Only for samples requiring head space)
10. Sample pH taken? NA ☐ pH < 2 ☒ pH > 2 ☐ pH > 9 ☐
11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed. Yes ☒ No ☐
12. Were any anomalies identified in sample receipt? Yes ☐ No ☒
13. Description of anomalies (include sample numbers): _____

Sample Custodian: Eric Daly

Date: 11/22/07 1510

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

☐ No action necessary; process as is.

Project Manager _____

Date _____

PNNL J7A230129 W05099 Due 03-08-09		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # S07-001-64
				Page <u>1</u> of <u>1</u>
Collector Hanford D. R. BREWINGTON	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN 	FAX
SAF No. S07-001	Sampling Origin Hanford Site	Purchase Order/Charge Code 		
Project Title SURV. JANUARY 2007	Logbook: HNF-N-S06-2	Ice Chest No.	SAWS-115	Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No. 		
Protocol SURV	Priority: 45 Days	Offsite Property No. 		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		

[illegible]

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix * S = Soil DS = Drum Solid SE = Sediment DI = Drum Lini SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time



STL

Sample Check-in List

Date/Time Received: 11/22/07 1510

Client: PNL SDG #: W05099 NA ☐ SAF #: S07-001 NA ☐

Work Order Number: J7A230/29

Chain of Custody #: S007-001-64,65

Shipping Container ID: _____

Air Bill #: _____

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet ☐ Dry ☐
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA ☒ Yes ☐ No ☐
8. Samples have:
____ tape
____ custody seals
____ hazard labels
____ appropriate samples labels
9. Samples are:
____ in good condition
____ broken
____ leaking
____ have air bubbles
(Only for samples requiring head space)
10. Sample pH taken? NA ☐ pH < 2 ☒ pH > 2 ☐ pH > 9 ☐
11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed. Yes ☒ No ☐
12. Were any anomalies identified in sample receipt? Yes ☐ No ☒
13. Description of anomalies (include sample numbers): _____

Sample Custodian: Erin Doherty

Date: 11/22/07 1510

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

☐ No action necessary; process as is.

Project Manager _____ Date _____

[illegible]

PNNL 7A230163 W05099 Due 03-08-07		<h2 style="margin:0;">CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</h2>		C.O.C. # <h3 style="margin:0;">A07-001-17</h3>	
				Page <u>1</u> of <u>1</u>	
Collector Fluor Hanford K. B. HULSE		Contact/Requester Dot Stewart		Telephone No. MSIN FAX 509-376-5056	
SAF No. A07-001		Sampling Origin Hanford Site		Purchase Order/Charge Code	
Project Title LLWMA(4)-PA. JANUARY 2007				Ice Chest No. Temp.	
Shipped To (Lab) Severn Trent Incorporated, Richland		Method of Shipment Govt. Vehicle		Bill of Lading/Air Bill No.	
Protocol Other		Priority: 45 Days		Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)				SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.	

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LN38		W	1/22/07	1044	1x20-mL P	Activity Scan	None
B1LN38		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1LN38		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1LN38		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None

Relinquished By Fluor Hanford Print K. B. HULSE Sign	Date/Time JAN 22 2007	Received By ERIC DOLY Print Eric Doly Sign	Date/Time 1-22-07	Matrix * S = Soil DS = Drum Solid SE = Sediment DI = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By	Date/Time	Received By	Date/Time	
Relinquished By	Date/Time	Received By	Date/Time	
Relinquished By	Date/Time	Received By	Date/Time	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)		
		Disposed By		Date/Time

PNNL <i>J7A230163</i> <i>W05099</i> <i>due 03-08-07</i>		<h2 style="margin:0;">CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</h2>		C.O.C. # <h1 style="margin:0;">A07-001-25</h1>	
				Page <u>1</u> of <u>1</u>	
Collector Fluor Hanford <i>D. E. PAROEN</i>		Contact/Requester Dot Stewart		Telephone No. MSIN FAX 509-376-5056	
SAF No. A07-001		Sampling Origin Hanford Site		Purchase Order/Charge Code	
Project Title LLWMA(4)-PA, JANUARY 2007		<i>HNF-N-506-3</i>		Ice Chest No. <i>C-4</i> Temp.	
Shipped To (Lab) Severn Trent Incorporated, Richland		Method of Shipment Govt. Vehicle		Bill of Lading/Air Bill No.	
Protocol Other		Priority: 45 Days		Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)			SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LN42		W	<i>1-22-07</i>	<i>1139</i>	1x20-mL P	Activity Scan	None
B1LN42		W	<i>↓</i>	<i>↓</i>	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1LN42		W	<i>↓</i>	<i>↓</i>	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1LN42		W	<i>↓</i>	<i>↓</i>	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1LN42		W	<i>↓</i>	<i>↓</i>	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						<i>Jm740</i>	

Relinquished By <i>Print</i> <i>Sign</i> <i>Date/Time</i> <i>1510</i> Fluor Hanford <i>D. E. PAROEN</i> <i>JAN 22 2007</i>		Received By <i>Print</i> <i>Sign</i> <i>Date/Time</i> <i>1510</i> <i>Eric Darby</i> <i>Er Darby</i> <i>JAN 22 2007</i>		Matrix * S = Soil DS = Drum Solid SE = Sediment DL = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By <i>Date/Time</i>		Received By <i>Date/Time</i>		
Relinquished By <i>Date/Time</i>		Received By <i>Date/Time</i>		
Relinquished By <i>Date/Time</i>		Received By <i>Date/Time</i>		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By <i>Date/Time</i>		



STL

Sample Check-in List

Date/Time Received: 1/22/07 1510

Client: PNL

SDG #: W05099 NA ☐ SAF #: A07-001 NA ☐

Work Order Number: J7A 230163

Chain of Custody # A07-001-1,11,17,25,26

Shipping Container ID: _____

Air Bill # _____

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet ☐ Dry ☐
6. Number of samples in shipping container: 5
7. Sample holding times exceeded? NA ☒ Yes ☐ No ☐
8. Samples have:
____ tape
____ custody seals
____ hazard labels
____ appropriate samples labels
9. Samples are:
____ in good condition
____ broken
____ leaking
____ have air bubbles
(Only for samples requiring head space)
10. Sample pH taken? NA ☐ pH < 2 ☒ pH > 2 ☐ pH > 9 ☐
11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed. Yes ☒ No ☐
12. Were any anomalies identified in sample receipt? Yes ☐ No ☒
13. Description of anomalies (include sample numbers): _____

Sample Custodian: Eve Doby Date: 1/22/07 1510

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

☐ No action necessary; process as is.

Project Manager _____ Date _____

PNNL J7A230259 W05099 <i>Due 03-09-07</i>		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # W07-011-574
		Page <u>1</u> of <u>1</u>		
Collector Fluor Hanford K. B. HULSE	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
SAF No. W07-011	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title RCRA NOVEMBER 2006	HNF-N-SOG-4	Ice Chest No. TJ-2	Temp.	
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol RCRA	Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		

[illegible]

Relinquished By		Print	Sign	Date/Time	Received By		Print	Sign	Date/Time	Matrix *	
Fluor Hanford K. B. HULSE			<i>K. B. Hulse</i>	JAN 23 2007	S. Smith			<i>S. Smith</i>	JAN 23 2007	S = Soil DS = Drum Solid SF = Sediment DL = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other	
Relinquished By				Date/Time	Received By				Date/Time		
Relinquished By				Date/Time	Received By				Date/Time		
Relinquished By				Date/Time	Received By				Date/Time		

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By		Date/Time

PNNL J7A230259 W05099 due 03-09-07		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # W07-011-580
Collector Huor Hanford K.B. HULSE		Contact/Requester Dot Stewart	Telephone No. MSIN 509-376-5056	Page <u>1</u> of <u>1</u>
SAF No. W07-011		Sampling Origin Hanford Site	Purchase Order/Charge Code	
Project Title RCRA, NOVEMBER 2006		HNF - N - SOG - 4	Ice Chest No. TJ-2	Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland		Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.	
Protocol RCRA		Priority: 45 Days	Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		
		Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

[illegible]

Relinquished By		Print	Sign	Date/Time	Received By		Print	Sign	Date/Time	Matrix *	
Relinquished By					Received By					S = Soil DS = Drum Solid SE = Sediment DI. = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other	
Relinquished By					Received By						
Relinquished By					Received By						
Relinquished By					Received By						

FINAL SAMPLE DISPOSITION

Disposal Method (e.g., Return to customer, per lab procedure, used in process)

Disposed By

Date/Time

PNNL 77A230259 W05099 due 03-09-07		<h2 style="text-align: center;">CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</h2>		C.O.C. # W07-011-546	
				Page <u>1</u> of <u>1</u>	
Collector Fluor Hanford K.B. HULSE		Contact/Requester Dot Stewart		Telephone No. MSIN FAX 509-376-5056	
SAF No. W07-011		Sampling Origin Hanford Site		Purchase Order/Charge Code	
Project Title RCRA, NOVEMBER 2006		HHF-N-SOG-4		Ice Chest No. TJ 2 Temp.	
Shipped To (Lab) Severn Trent Incorporated, Richland		Method of Shipment Govt. Vehicle		Bill of Lading/Air Bill No.	
Protocol RCRA		Priority: 45 Days		Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)			SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		

[illegible]

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *	
K. B. HULSE			JAN 23 2007				JAN 23 2007	S = Soil	DS = Drum Solid
Relinquished By			Date/Time	Received By			Date/Time	SF = Sediment	DL = Drum Liquid
Relinquished By			Date/Time	Received By			Date/Time	SO = Solid	T = Tissue
Relinquished By			Date/Time	Received By			Date/Time	SL = Sludge	WI = Wine
Relinquished By			Date/Time	Received By			Date/Time	W = Water	L = Liquid
Relinquished By			Date/Time	Received By			Date/Time	O = Oil	V = Vegetation
Relinquished By			Date/Time	Received By			Date/Time	A = Air	X = Other
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By			Date/Time	



STL

Sample Check-in List

Date/Time Received: 01.23.07 1405

Client: P6U

SDG #: W05099

NA ()

SAF #: W07-011

NA ()

Work Order Number: 07A230259

Chain of Custody # W07-011-574, 580, 546

Shipping Container ID: _____

Air Bill # _____

1. Custody Seals on shipping container intact? NA () Yes (☒) No ()
2. Custody Seals dated and signed? NA () Yes (☒) No ()
3. Chain of Custody record present? Yes (☒) No ()
4. Cooler temperature: _____ NA (☒) 5. Vermiculite/packing materials is NA (☒) Wet () Dry ()
6. Number of samples in shipping container: 3
7. Sample holding times exceeded? NA (☒) Yes () No ()
8. Samples have: _____ NA (☒) Yes () No ()
 - _____ tape
 - _____ custody seals
 - _____ hazard labels
9. Samples are: 1 in good condition _____ appropriate samples labels
 - _____ broken
 - _____ leaking
 - _____ have air bubbles(Only for samples requiring head space)
10. Sample pH taken? NA () pH < 2 () pH > 2 (☒) pH > 9 ()
11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed. Yes (☒) No ()
12. Were any anomalies identified in sample receipt? Yes () No (☒)
13. Description of anomalies (include sample numbers): _____

Sample Custodian: _____

J. Sm. V.

Date: 01.23.07 1405

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____

by _____

Person contacted _____

() No action necessary; process as is.

Project Manager _____

Date _____

PNNL J7A230265 W05099 due 03-09-07		<h2 style="text-align: center;">CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</h2>		C.O.C. # S07-012-588	
				Page <u>1</u> of <u>1</u>	
Collector Fluor Hanford		Contact/Requester Dot Stewart		Telephone No. MSIN FAX 509-376-5056	
SAF No. S07-012		Sampling Origin Hanford Site		Purchase Order/Charge Code	
Project Title SURV. DECEMBER 2006		HNF - N - 506 3		Ice Chest No. Temp. 620-06-8	
Shipped To (Lab) Severn Trent Incorporated, Richland		Method of Shipment Govt. Vehicle		Bill of Lading/Air Bill No.	
Protocol SURV		Priority: 45 Days		Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)			SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		

[illegible]

Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time	Matrix * S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine L = Liquid V = Vegetation X = Other
Relinquished By				Received By				
Relinquished By				Received By				
Relinquished By				Received By				
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)							Date/Time

[illegible]



STL

Sample Check-in List

Date/Time Received: 1/23/07 1400

Client: PNL

SDG #: W05099 NA ☐ SAF #: S07-012 NA ☐

Work Order Number: J7A230265

Chain of Custody # S07-012,538,588

Shipping Container ID: _____

Air Bill # _____

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet ☐ Dry ☐
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA ☒ Yes ☐ No ☐
8. Samples have:
____ tape
____ custody seals
____ hazard labels
____ appropriate samples labels
9. Samples are:
____ in good condition
____ broken
____ leaking
____ have air bubbles
(Only for samples requiring head space)
10. Sample pH taken? NA ☐ pH < 2 ☐ pH > 2 ☒ pH > 9 ☐
11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed. Yes ☒ No ☐
12. Were any anomalies identified in sample receipt? Yes ☐ No ☒
13. Description of anomalies (include sample numbers): _____

Sample Custodian: Eue Donly

Date: 1/23/07 1400

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

☐ No action necessary; process as is.

Project Manager _____ Date _____

2/14/2007 10:44:10 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National LabAZ Gross Alpha PrpRC5014
S7 Gross Alpha by GPC using Am-241 curve
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 03/05/2007







Sep1 DT/Tm Tech:

Batch: 7026401 WATER pCi/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 7026396 FPS5, 7026401 AZS7, 7026402 BCS8,

Prep Tech: BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JM6JQ-1-AA J7A220134-1-SAMP 	110.80g,in									
01/19/2007 09:09		AmtRec: 20ML,500ML,LP	#Containers: 3					Scr: Alpha: 1.33E-03 uCi/Sa 2.0E-01L	Beta: 2.28E-04 uCi/Sa	
2 JM6JQ-1-AE-X J7A220134-1-DUP 	113.40g,in									
01/19/2007 09:09		AmtRec: 20ML,500ML,LP	#Containers: 3					Scr: Alpha: 1.33E-03 uCi/Sa 2.0E-01L	Beta: 2.28E-04 uCi/Sa	
3 JM6JQ-2-AA J7A220134-1-SAMP 	110.8g			36.3	100mm		10B			
01/19/2007 09:09		AmtRec: 20ML,500ML,LP	#Containers: 3					Scr: Alpha: 1.33E-03 uCi/Sa 2.0E-01L	Beta: 2.28E-04 uCi/Sa	2/14/07
4 JM6JQ-2-AE-X J7A220134-1-DUP 	113.4			37.7			10C			
01/19/2007 09:09		AmtRec: 20ML,500ML,LP	#Containers: 3					Scr: Alpha: 1.33E-03 uCi/Sa 2.0E-01L	Beta: 2.28E-04 uCi/Sa	
5 JNG09-1-AA-B J7A260000-401-BLK 	202.80g,in									
01/19/2007 09:09		AmtRec:	#Containers: 1					Scr: Alpha:	Beta:	
6 JNG09-1-AC-C J7A260000-401-LCS 	205.00g,in		ASD4116 01/18/07,pd 02/09/06,r							
01/19/2007 09:09		AmtRec:	#Containers: 1					Scr: Alpha:	Beta:	

CAREFUL High in Beta

2/14/2007 10:44:14 AM

Sample Preparation/Analysis

Balance Id:1120482733

AZ Gross Alpha PrpRC5014
S7 Gross Alpha by GPC using Am-241 curve
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 03/05/2007

Sep1 DT/Tm Tech:


Batch: 7026401

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

										Prep Tech: Bock	
Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:	

Comments: JM6JQ-SAMP "Comments. Aliquots reduced due to weight screen activity. JB 02/02/07"

All Clients for Batch:

384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JM6JQ1AA-SAMP Constituent List:

ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JNG091AA-BLK:					
ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JNG091AC-LCS:					
Am-241	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

JM6JQ1AA-SAMP Calc Info:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JNG091AA-BLK:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JNG091AC-LCS:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____ Date: _____

2/2/2007 9:23:36 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National LabBC Gross Beta PrpRC5014
S8 Gross Beta by GPC using Sr/Y-90 curve
5I CLIENT: HANFORD

Pipet #: 235

AnalyDueDate: 03/05/2007 W05099

Sep1 DT/Tm Tech:

Batch: 7026402 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

Prep Tech: BockJ / APA

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JM6JQ-1-AC J7A220134-1-SAMP 01/19/2007 09:09	125.10g,in									
1.5 127.1 100 26A 1544 2/13/07										
AmtRec: 20ML,500ML,LP			#Containers: 3		Scr: Alpha: 1.33E-03 uCi/Sa 2.0E-01L			Beta: 2.28E-04 uCi/Sa		
2 JM6JQ-1-AF-X J7A220134-1-DUP 01/19/2007 09:09	125.10g,in									
116.4 26B										
AmtRec: 20ML,500ML,LP			#Containers: 3		Scr: Alpha: 1.33E-03 uCi/Sa 2.0E-01L			Beta: 2.28E-04 uCi/Sa		
3 JNG1A-1-AA-B J7A260000-402-BLK 01/19/2007 09:09	200.30g,in									
0.2 26C										
AmtRec:			#Containers: 1		Scr:			Alpha:		
4 JNG1A-1-AC-C J7A260000-402-LCS 01/19/2007 09:09	200.20g,in		BESB2996 01/23/07,pd 08/08/06,r							
0.4 26D										
AmtRec:			#Containers: 1		Scr:			Alpha:		

Comments: Aliquots reduced due to weight screen activity. 2-2-07
PA 12.0 2-2-07

10% collodion added to ea. samp. 2/13/07 APA

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JM6JQ1AC-SAMP Constituent List:

BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
JNG1A1AA-BLK:					
BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
JNG1A1AC-LCS:					
Sr-90	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

JM6JQ1AC-SAMP Calc Info:

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 4
Prep_SamplePrep v4.8.26

Balance Id:1120482733

Pipet #:

Sep1 DT/Tm Tech: 02/02/2007 16:21,ManisD

Sep2 DT/Tm Tech: 02/09/2007 08:45,ManisD

Prep Tech: ,BockJ

2/9/2007 2:21:41 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabCL Sr-90 Prp/SepRC5006(5071)
TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth
SI CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 03/05/2007

Sep1 DT/Tm Tech: 02/02/2007 16:21,ManisD

Batch: 7026384 WATER




pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech: 02/09/2007 08:45,ManisD

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
5 JM72X-1-AA J7A230129-2-SAMP 		1005.10g,in	sr1b14466 01/24/07,pd 09/11/06,r		1.0	24.4	100		3b 1059	2/10/07 r	
02/02/2007 16:21,s1, 02/09/2007										3b 1012	2/11/07 r
01/22/2007 12:53	AmtRec: 20ML,3XLP		#Containers: 4		Scr:		Alpha: -5.70E-04 uCi/Sa		Beta: 2.40E-04 uCi/Sa		
6 JNGX3-1-AA-B J7A260000-384-BLK 		1000.40g,in	sr1b14467 01/24/07,pd 09/11/06,r		1.0	23.9	100		3c 1059	2/10/07 r	
02/02/2007 16:21,s1, 02/09/2007										3c 1012	2/11/07 r
01/22/2007 12:53	AmtRec:		#Containers: 1		Scr:		Alpha:		Beta:		
7 JNGX3-1-AC-C J7A260000-384-LCS 		999.20g,in	srsg1310 12/20/06,pd 09/11/06,r		1.0	23.7	100		3d 1059	2/10/07 r	
02/02/2007 16:21,s1, 02/09/2007										3d 1012	2/11/07 r
01/22/2007 12:53	AmtRec:		#Containers: 1		Scr:		Alpha:		Beta:		

Comments:

All Clients for Batch:

384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JM5M91AA-SAMP Constituent List:

Sr-85 RDL: pCi/L LCL:20 UCL:105 RPD:20 Sr-90 RDL:2 pCi/L LCL:70 UCL:130 RPD:20

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 7
Prep_SamplePrep v4.8.26

2/15/2007 12:26:40 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

BN I-129 Prp/SepRC5025

TB Gamma by LEPD

Pipet #: _____

AnalyDueDate: 03/05/2007 *W05099*

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:








Batch: 7026400 WATER pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JM6FX-1-AA J7A220119-1-SAMP  01/19/2007 13:21	3954.10g,in	ITA6013 01/17/07								
				37.1	100	L2	1614	2/21/07 R		
				AmtRec: 20ML,2X4LP #Containers: 3		Scr: Alpha: -1.62E-03 uCi/Sa		Beta: 1.39E-03 uCi/Sa		
2 JM731-1-AA J7A230163-1-SAMP  01/22/2007 13:25	3917.60g,in	ITA6014 01/17/07								
				35.9		L4	1618			
				AmtRec: 20ML,500ML,2X4LP #Containers: 4		Scr: Alpha: 1.70E-04 uCi/Sa		Beta: -1.02E-03 uCi/Sa		
3 JM731-1-AE-X J7A230163-1-DUP  01/22/2007 13:25	3902.40g,in	ITA6015 01/17/07								
				35.1		²⁵ 4 L5 2/21/07	1619			
				AmtRec: 20ML,500ML,2X4LP #Containers: 4		Scr: Alpha: 1.70E-04 uCi/Sa		Beta: -1.02E-03 uCi/Sa		
4 JM738-1-AC J7A230163-2-SAMP  01/22/2007 12:05	3919.00g,in	ITA6016 01/17/07								
				37.0		L2	1805	2/21/07 00		
				AmtRec: 20ML,500ML,LP,2X4LP #Containers: 5		Scr: Alpha: -7.69E-04 uCi/Sa		Beta: 1.77E-03 uCi/Sa		
5 JM74E-1-AC J7A230163-3-SAMP  01/22/2007 10:44	3909.90g,in	ITA6017 01/17/07								
				36.2		L4	1809			
				AmtRec: 20ML,500ML,LP,2X4LP #Containers: 5		Scr: Alpha: 9.34E-04 uCi/Sa		Beta: -1.25E-03 uCi/Sa		
6 JM740-1-AC J7A230163-4-SAMP  01/22/2007 11:39	3842.40g,in	ITA6018 01/17/07								
				35.8		L5	1811			
				AmtRec: 20ML,2X500ML,LP,2X4LP #Containers: 6		Scr: Alpha: 1.05E-03 uCi/Sa		Beta: 1.15E-03 uCi/Sa		
7 JM742-1-AC J7A230163-5-SAMP  01/22/2007 08:00	3824.40g,in	ITA6019 01/17/07								
				35.9	✓	L2	1950			
				AmtRec: 20ML,2X500ML,LP,2X4LP #Containers: 6		Scr: Alpha: -6.13E-04 uCi/Sa		Beta: 4.47E-04 uCi/Sa		

2/15/2007 12:26:43 PM

Sample Preparation/Analysis

Balance Id:1120482733

BN I-129 Prp/SepRC5025

TB Gamma by LEPD

Pipet #: _____

AnalyDueDate: 03/05/2007

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 7026400

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JNG08-1-AA-B J7A260000-400-BLK 01/22/2007 13:25		3997.80g.in	ITA6020 01/17/07		36.3	100	L4	2002	2/21/07 OK	
<hr/>										
AmtRec: #Containers: 1 Scr: Alpha: Beta:										
9 JNG08-1-AC-C J7A260000-400-LCS 01/22/2007 13:25		3870.10g.in	ISD0726 12/20/06		39.4	4	L5	2002		
<hr/>										
AmtRec: #Containers: 1 Scr: Alpha: Beta:										

Comments: PH L2.0 JB 2-15-07

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA, 57671

JM6FX1AA-SAMP Constituent List:

I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
JNG081AA-BLK:					
I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
JNG081AC-LCS:					
I-129	RDL:5	pCi/L	LCL:70	UCL:130	RPD:20

JM6FX1AA-SAMP Calc Info:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JNG081AA-BLK:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JNG081AC-LCS:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____ Date: _____

2/1/2007 11:10:02 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National LabFP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 03/05/2007 *W05099*








Sep1 DT/Tm Tech:

Batch: 7026396 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JM5PC-1-AA J7A200176-1-SAMP  01/18/2007 12:54			125.20g,in	125.20g						
<i>60</i>										
			AmtRec: 20ML,500ML	#Containers: 2			Scr:	Alpha: 5.31E-05 uCi/Sa	Beta: -5.39E-05 uCi/Sa	
2 JM5PE-1-AA J7A200176-2-SAMP  01/18/2007 11:14			126.30g,in	126.30g						
			AmtRec: 20ML,500ML	#Containers: 2			Scr:	Alpha: 1.43E-05 uCi/Sa	Beta: -4.82E-05 uCi/Sa	
3 JM6JQ-1-AD J7A220134-1-SAMP  01/19/2007 09:09			125.00g,in	125.00g						
			AmtRec: 20ML,500ML,LP	#Containers: 3			Scr:	Alpha: 1.33E-03 uCi/Sa 2.0E-01L	Beta: 2.28E-04 uCi/Sa	
4 JM6J2-1-AA J7A220134-2-SAMP  01/19/2007 10:20			124.90g,in	124.90g						
			AmtRec: 20ML,500ML	#Containers: 2			Scr:	Alpha: -1.32E-05 uCi/Sa	Beta: 2.25E-05 uCi/Sa	
5 JM7NK-1-AA J7A230123-1-SAMP  01/22/2007 10:06			125.30g,in	125.30g						
			AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha: -7.78E-05 uCi/Sa	Beta: 8.69E-05 uCi/Sa	
6 JM731-1-AC J7A230163-1-SAMP  01/22/2007 13:25			126.00g,in	126.00g						
			AmtRec: 20ML,500ML,2X4LP	#Containers: 4			Scr:	Alpha: 1.70E-04 uCi/Sa	Beta: -1.02E-03 uCi/Sa	
7 JM731-1-AD-S J7A230163-1-MS  01/22/2007 13:25			126.70g,in	126.70g	tcsq1763 01/03/07,pd 01/10/06,r					
			AmtRec: 20ML,500ML,2X4LP	#Containers: 4			Scr:	Alpha: 1.70E-04 uCi/Sa	Beta: -1.02E-03 uCi/Sa	

Balance Id:1120482733








Pipet #: _____

Sep1 DT/Tm Tech:

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JM738-1-AD			128.00g,in	128.00g						
J7A230163-2-SAMP										
										
01/22/2007 12:05			AmtRec: 20ML,500ML,LP,2X4LP #Containers: 5				Scr:	Alpha: -7.69E-04 uCi/Sa	Beta: 1.77E-03 uCi/Sa	
9 JM738-1-AF-X			124.90g,in	124.90g						
J7A230163-2-DUP										
										
01/22/2007 12:05			AmtRec: 20ML,500ML,LP,2X4LP #Containers: 5				Scr:	Alpha: -7.69E-04 uCi/Sa	Beta: 1.77E-03 uCi/Sa	
10 JM74E-1-AD			125.00g,in	125.00g						
J7A230163-3-SAMP										
										
01/22/2007 10:44			AmtRec: 20ML,500ML,LP,2X4LP #Containers: 5				Scr:	Alpha: 9.34E-04 uCi/Sa	Beta: -1.25E-03 uCi/Sa	
11 JM740-1-AD			125.00g,in	125.00g						
J7A230163-4-SAMP										
										
01/22/2007 11:39			AmtRec: 20ML,2X500ML,LP,2X4LP #Containers: 6				Scr:	Alpha: 1.05E-03 uCi/Sa	Beta: 1.15E-03 uCi/Sa	
12 JM742-1-AD			125.70g,in	125.70g						
J7A230163-5-SAMP										
										
01/22/2007 08:00			AmtRec: 20ML,2X500ML,LP,2X4LP #Containers: 6				Scr:	Alpha: -6.13E-04 uCi/Sa	Beta: 4.47E-04 uCi/Sa	
13 JNG06-1-AA-B			202.10g,in	202.10g						
J7A260000-396-BLK										
										
01/22/2007 13:25			AmtRec: #Containers: 1				Scr:	Alpha:	Beta:	
14 JNG06-1-AC-C			201.70g,in	201.70g	tcse2064 01/24/07,pd 01/10/06,r					
J7A260000-396-LCS										
										
01/22/2007 13:25			AmtRec: #Containers: 1				Scr:	Alpha:	Beta:	

2/1/2007 11:10:10 AM

Sample Preparation/Analysis

Balance Id:

FP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 03/05/2007

Sep1 DT/Tm Tech:

Batch: 7026396




pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:



Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 JNG06-1-AD-BN J7A260000-396-IBLK  01/22/2007 13:25										
AmtRec: #Containers: 1 Scr: Alpha: Beta:										
16 JNG06-1-AE-BX J7A260000-396-MBLK  01/22/2007 13:25										
AmtRec: #Containers: 1 Scr: Alpha: Beta:										
17 JNG06-1-AF-BN J7A260000-396-IBLK  01/22/2007 13:25										
AmtRec: #Containers: 1 Scr: Alpha: Beta:										

Comments: JH L2.0 JB 2-1-07

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JM5PC1AA-SAMP Constituent List:

Tc-99	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20
-------	--------	-------	--------	---------	--------

JM7311AD-MS:

JNG061AA-BLK:

Tc-99	RDL:15	pCi/L	LCL:	UCL:	RPD:
-------	--------	-------	------	------	------

JNG061AC-LCS:

Tc-99	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20
-------	--------	-------	--------	---------	--------

JNG061AD-IBLK:

Tc-99	RDL:15	pCi/L	LCL:	UCL:	RPD:
-------	--------	-------	------	------	------

JNG061AE-MBLK:

Tc-99	RDL:15	pCi/L	LCL:	UCL:	RPD:
-------	--------	-------	------	------	------

JNG061AF-IBLK:

Tc-99	RDL:15	pCi/L	LCL:	UCL:	RPD:
-------	--------	-------	------	------	------

1/26/2007 4:36:56 PM

Sample Preparation/Analysis

Balance Id:

12445

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National LabAR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 03/08/2007 W05099

Sep1 DT/Tm Tech:

22-010m

Batch: 7026385

WATER

pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
--------------------------------------	-------------------	-----------------------------	------------------------	-------------------	----------------	---------------------------------	--------------------------	-----------

1 JM738-1-AA

J7A230163-2-SAMP



01/22/2007 12:05

AmtRec: 20ML,500ML,LP,2X4LP #Containers: 5

Scr:

Alpha:

Beta:

2 JM738-1-AE-X

J7A230163-2-DUP



01/22/2007 12:05

AmtRec: 20ML,500ML,LP,2X4LP #Containers: 5

Scr:

Alpha:

Beta:

3 JM74E-1-AA

J7A230163-3-SAMP



01/22/2007 10:44

AmtRec: 20ML,500ML,LP,2X4LP #Containers: 5

Scr:

Alpha:

Beta:

4 JM740-1-AA

J7A230163-4-SAMP



01/22/2007 11:39

AmtRec: 20ML,2X500ML,LP,2X4LP #Containers: 6

Scr:

Alpha:

Beta:

5 JM742-1-AA

J7A230163-5-SAMP



01/22/2007 08:00

AmtRec: 20ML,2X500ML,LP,2X4LP #Containers: 6

Scr:

Alpha:

Beta:

6 JNG0E-1-AA-B

J7A260000-385-BLK



01/22/2007 12:05

AmtRec: #Containers: 1

Scr:

Alpha:

Beta:

7 JNG0E-1-AC-C

J7A260000-385-LCS



01/22/2007 12:05

AmtRec: #Containers: 1

Scr:

Alpha:

Beta:

1/26/2007 4:37:00 PM

Sample Preparation/Analysis

Balance Id:

12445

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 03/08/2007

Sep1 DT/Tm Tech:

JZ Olson

Batch: 7026385

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
--------------------------------------	-------------------	-----------------------------	------------------------	-------------------	----------------	---------------------------------	--------------------------	-----------

8 JNG0E-1-AD-BX

J7A260000-385-MBLK



01/22/2007 12:05

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

9 JNG0E-1-AE-CM

J7A260000-385-MLCS



01/22/2007 12:05

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

10 JNG0E-1-AF-BN

J7A260000-385-IBLK



01/22/2007 12:05

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

11 JNG0E-1-AG-BN

J7A260000-385-IBLK



01/22/2007 12:05

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

Comments:

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JM7381AA-SAMP Constituent List:

H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JNG0E1AA-BLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
JNG0E1AC-LCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JNG0E1AD-MBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2

ISV - Insufficient Volume for Analysis

WO Cnt: 11

Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ICOC v4.8.26

1/26/2007 4:37:06 PM

Sample Preparation/Analysis

Balance Id:

12445

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 03/08/2007

Sep1 DT/Tm Tech:

J. J. Odom

Batch: 7026385

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
JNG0E1AE-MLCS:								
H-3 RDL:400	pCi/L	LCL:70	UCL:130	RPD:20				
JNG0E1AF-IBLK:								
H-3 RDL:400	pCi/L	LCL:	UCL:	RPD:				
JNG0E1AG-IBLK:								
H-3 RDL:400	pCi/L	LCL:	UCL:	RPD:				
JM7381AA-SAMP Calc Info:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
JNG0E1AA-BLK:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
JNG0E1AC-LCS:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
JNG0E1AD-MBLK:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
JNG0E1AE-MLCS:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
JNG0E1AF-IBLK:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
JNG0E1AG-IBLK:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				

Approved By

Date:

2/19/2007 9:01:36 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

DH UNat_Laser PrpRC5015

SS Total Uranium by KPA

Pipet #: _____

AnalyDueDate: 03/08/2007

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 7026383 WATER








ug/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ / APA

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JM740-1-AE J7A230163-4-SAMP  01/22/2007 11:39	25.40g,in							
AmtRec: 20ML,2X500ML,LP,2X4LP #Containers: 6 Scr: Alpha: 1.05E-03 uCi/Sa Beta: 1.15E-03 uCi/Sa								
2 JM740-1-AF-S J7A230163-4-MS  01/22/2007 11:39	24.80g,in		UNSF3577 01/31/07,pd 03/22/05,r					
AmtRec: 20ML,2X500ML,LP,2X4LP #Containers: 6 Scr: Alpha: 1.05E-03 uCi/Sa Beta: 1.15E-03 uCi/Sa								
3 JM742-1-AE J7A230163-5-SAMP  01/22/2007 08:00	25.50g,in							
AmtRec: 20ML,2X500ML,LP,2X4LP #Containers: 6 Scr: Alpha: -6.13E-04 uCi/Sa Beta: 4.47E-04 uCi/Sa								
4 JM742-1-AF-X J7A230163-5-DUP  01/22/2007 08:00	27.30g,in							
AmtRec: 20ML,2X500ML,LP,2X4LP #Containers: 6 Scr: Alpha: -6.13E-04 uCi/Sa Beta: 4.47E-04 uCi/Sa								
5 JNGXV-1-AA-B J7A260000-383-BLK  01/22/2007 11:39	25.20g,in							
AmtRec: #Containers: 1 Scr: Alpha: Beta:								
6 JNGXV-1-AC-C J7A260000-383-LCS  01/22/2007 11:39	25.20g,in		UNSF3578 01/31/07,pd 03/22/05,r					
AmtRec: #Containers: 1 Scr: Alpha: Beta:								
7 JNGXV-1-AD-C J7A260000-383-LCS  01/22/2007 11:39	25.30g,in		UNSC1480 01/10/07,pd 04/28/06,r					
AmtRec: #Containers: 1 Scr: Alpha: Beta:								

STL Richland

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 7

Richland Wa.

pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ICOC v4.8.26

1/26/2007 4:36:46 PM

Sample Preparation/Analysis

Balance Id:

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
IZ COLIFORM BY METHOD 9223

Pipet #:

AnalyDueDate: 03/09/2007 005099

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 7026382 WATER

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
--------------------------------------	-------------------	-----------------------------	------------------------	-------------------	----------------	---------------------------------	--------------------------	-----------

1 JM8VH-1-AA

J7A230259-1-SAMP



01/23/2007 10:36

AmtRec: 20ML,500MLP

#Containers: 2

Scr:

Alpha:

Beta:

2 JM8V0-1-AA

J7A230259-2-SAMP



01/23/2007 09:51

AmtRec: 20ML,500MLP

#Containers: 2

Scr:

Alpha:

Beta:

3 JM8V0-1-AC-X

J7A230259-2-DUP



01/23/2007 09:51

AmtRec: 20ML,500MLP

#Containers: 2

Scr:

Alpha:

Beta:

4 JM8V2-1-AA

J7A230259-3-SAMP



01/23/2007 09:01

AmtRec: 20ML,500MLP

#Containers: 2

Scr:

Alpha:

Beta:

5 JNGXQ-1-AA-B

J7A260000-382-BLK



01/23/2007 09:51

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

6 JNGXQ-1-AC-C

J7A260000-382-LCS



01/23/2007 09:51

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

1/26/2007 4:36:51 PM

Sample Preparation/Analysis

Balance Id: _____

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
IZ COLIFORM BY METHOD 9223

Pipet #: _____

AnalyDueDate: 03/09/2007

51 CLIENT: HANFORD

Sep1 DT/Tm Tech: _____

Batch: 7026382

SEQ Batch, Test: None

Sep2 DT/Tm Tech: _____

Prep Tech: _____



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
--------------------------------------	-------------------	-----------------------------	------------------------	-------------------	----------------	---------------------------------	--------------------------	-----------

Comments:

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JM8VH1AA-SAMP Constituent List:

JNGXQ1AA-BLK:

JNGXQ1AC-LCS:

JM8VH1AA-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JNGXQ1AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JNGXQ1AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____

Date: _____

RQC050

Severn Trent Laboratories, Inc.
WET CHEM BATCHSHEETRun Date: 2/28/07
Time: 11:59:35

STL Richland

PRODUCTION FIGURES - WET CHEM

<u>TOTAL</u> <u>NUMBER</u>	<u>SAMPLE</u> <u>NUMBER</u>	<u>QC</u>	<u>RE-RUN</u> <u>MATRIX</u>	<u>RE-RUN</u> <u>OTHER</u>	<u>MISC</u> <u>NUMBER</u>	<u>TOTAL</u> <u>HOURS</u>	<u>EXPANDED</u> <u>DELIVERABLE</u>
-------------------------------	--------------------------------	-----------	--------------------------------	-------------------------------	------------------------------	------------------------------	---------------------------------------

METHOD: IZ COLIFORM BY METHOD 9223

QC BATCH #: 7026382

PREP DATE: 1/26/07

COMP DATE: 1/26/07

USER: MILLERK2

INITIALS:

PREP _____

ANAL _____

DATA ENTRY:

INITIALS _____

DATE _____

<u>Work Order</u>	<u>Lab Number</u>	<u>Structured</u> <u>Analysis</u>	<u>Exp.</u> <u>Del.</u>	<u>Analysis</u> <u>Date</u>	<u>Sample ID:</u>
JM8VH-1-AA	J-7A230259-001	XX I 88 IZ 5I	E	<1	B1L6H6
JM8V0-1-AA	J-7A230259-002	XX I 88 IZ 5I	E	<1	B1L6J0
JM8V0-1-AC	J-7A230259-002-X	XX I 88 IZ 5I	E	<1	B1L6J0 DUP
JM8V2-1-AA	J-7A230259-003	XX I 88 IZ 5I	E	<1	B1L6D8
JNGXQ-1-AA	J-7A260000-382-B	XX I 88 IZ 5I		<1	INTRA-LAB BLANK
JNGXQ-1-AC	J-7A260000-382-C	XX I 88 IZ 5I		13.5	INTRA-LAB CHECK

Control Limits

(0-0)

SE
2/28/07

2/14/2007 1:26:48 PM

ICOC Fraction Transfer/Status Report

ByDate: 2/14/2006, 2/19/2007, Batch: '7026401', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7026401				
AC	CalcC	BockJ	2/2/2007 9:24:06 AM	
SC		andersonp	IsBatched 1/26/2007 4:38:03 PM	ICOC_RADCALC v4.8.26
SC		BockJ	InPrep 2/2/2007 9:24:06 AM	RICH-RC-5014 Revision 6
SC		BockJ	Prep1C 2/2/2007 9:27:57 AM	RICH-RC-5014 REVISION 6
SC		AshworthA	InPrep2 2/12/2007 11:43:43 AM	RICH-RC-5014 REVISION 6
SC		AshworthA	Prep2C 2/13/2007 1:57:39 PM	RICH-RC-5014 REVISION 6
SC		BlackCL	InCnt1 2/13/2007 2:00:54 PM	RICH-RD-0003 REVISION 4
SC		DAWKINSO	CalcC 2/13/2007 7:28:23 PM	RICH-RD-0003 REVISION 4
SC		BlackCL	InCnt1 2/14/2007 10:52:02 AM	RICH-RD-0003 REVISION 4
SC		StringerR	CalcC 2/14/2007 12:53:54 PM	RICH-RD-0003 REVISION 4
AC		BockJ	2/2/2007 9:27:57 AM	
AC		BockJ	2/2/2007 9:28:40 AM	
AC		AshworthA	2/12/2007 11:43:43	
AC		AshworthA	2/13/2007 1:57:39 PM	
AC		BlackCL	2/13/2007 2:00:54 PM	
AC		DAWKINSO	2/13/2007 7:28:23 PM	
AC		BlackCL	2/14/2007 10:52:02	
AC		StringerR	2/14/2007 12:53:54	

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

2/14/2007 11:08:35 AM

ICOC Fraction Transfer/Status Report

ByDate: 2/14/2006, 2/19/2007, Batch: '7026402', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting		Comments
7026402					
AC	CalcC	BockJ	2/2/2007 9:18:51 AM		
SC		andersonp	IsBatched	1/26/2007 4:38:03 PM	ICOC_RADCALC v4.8.26
SC		BockJ	InPrep	2/2/2007 9:18:51 AM	RICH-RC-5014 Revision 6
SC		BockJ	Prep1C	2/2/2007 9:23:42 AM	RICH-RC-5014 REVISION 6
SC		AshworthA	InPrep2	2/12/2007 11:43:50 AM	RICH-RC-5014 REVISION 6
SC		AshworthA	Prep2C	2/13/2007 1:57:50 PM	RICH-RC-5014 REVISION 6
SC		BlackCL	InCnt1	2/13/2007 2:00:58 PM	RICH-RD-0003 REVISION 4
SC		DAWKINSO	CalcC	2/13/2007 7:28:40 PM	RICH-RD-0003 REVISION 4
AC		BockJ	2/2/2007 9:23:42 AM		
AC		BockJ	2/2/2007 9:28:52 AM		
AC		AshworthA	2/12/2007 11:43:50		
AC		AshworthA	2/13/2007 1:57:50 PM		
AC		BlackCL	2/13/2007 2:00:58 PM		
AC		DAWKINSO	2/13/2007 7:28:40 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

2/12/2007 2:43:01 PM

ICOC Fraction Transfer/Status Report

ByDate: 2/12/2006, 2/17/2007, Batch: '7026384', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7026384				
AC	CalcC	BockJ	2/1/2007 9:11:20 AM	
SC		andersonp	IsBatched	1/26/2007 4:36:25 PM
SC		BockJ	InPrep	2/1/2007 9:11:20 AM
SC		BockJ	Prep1C	2/1/2007 9:28:32 AM
SC		ManisD	InSep1	2/1/2007 9:31:39 AM
SC		ManisD	Sep1C	2/2/2007 4:30:42 PM
SC		DAWKINSO	InCnt1	2/2/2007 4:43:13 PM
SC		DAWKINSO	Cnt1C	2/2/2007 7:52:09 PM
SC		ManisD	Sep2C	2/9/2007 2:23:20 PM
SC		StringerR	InCnt1	2/9/2007 2:25:12 PM
SC		StringerR	CalcC	2/11/2007 11:45:45 AM
AC		BockJ	2/1/2007 9:28:32 AM	
AC		BockJ	2/1/2007 9:28:41 AM	
AC		ManisD	2/1/2007 9:31:39 AM	
AC		ManisD	2/2/2007 4:30:42 PM	
AC		DAWKINSO	2/2/2007 4:43:13 PM	
AC		DAWKINSO	2/2/2007 7:52:09 PM	
AC		ManisD	2/9/2007 2:23:20 PM	
AC		StringerR	2/9/2007 2:25:12 PM	
AC		StringerR	2/9/2007 2:25:38 PM	
AC		StringerR	2/11/2007 11:45:45	

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

2/22/2007 1:22:20 PM

ICOC Fraction Transfer/Status Report

ByDate: 2/22/2006, 2/27/2007, Batch: '7026400', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7026400						
AC	CalcC	BockJ	2/15/2007 11:55:55			
SC		andersonp	IsBatched	1/26/2007 4:38:03 PM		ICOC_RADCALC v4.8.26
SC		BockJ	InPrep	2/15/2007 11:55:55 AM		rich-rc-5017 rEVISION 5
SC		BockJ	Prep1C	2/15/2007 12:28:03 PM		RICH-RC-5017 REVISION 5
SC		BostedD	InPrep2	2/19/2007 1:14:07 PM		RICHRC5025 REV3
SC		BostedD	Prep2C	2/21/2007 2:12:04 PM		RICHRC5025 REV3
SC		StringerR	InCnt1	2/21/2007 2:32:47 PM		RICH-RD-0007 REVISION 5
SC		DAWKINSO	CalcC	2/21/2007 8:47:02 PM		RICH-RD-0007 REVISION 5
AC		BockJ	2/15/2007 12:27:44			
AC		BockJ	2/15/2007 12:28:03			
AC		BostedD	2/19/2007 1:14:07 PM			
AC		BostedD	2/21/2007 2:11:45 PM			
AC		BostedD	2/21/2007 2:12:04 PM			
AC		StringerR	2/21/2007 2:32:47 PM			
AC		DAWKINSO	2/21/2007 8:47:02 PM			
AC		DAWKINSO	2/21/2007 9:10:03 PM			

AC: Accepting Entry; SC: Status Change

STL Richland
Richland Wa.

2/5/2007 4:16:45 PM

ICOC Fraction Transfer/Status Report

ByDate: 2/5/2006, 2/10/2007, Batch: '7026396', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7026396				
AC	CalcC	BockJ	2/1/2007 10:49:26	
SC		andersonp	IsBatched 1/26/2007 4:38:03 PM	ICOC_RADCALC v4.8.26
SC		BockJ	InPrep 2/1/2007 10:49:26 AM	rich-rc-5016 rEVISION 6
SC		BockJ	Prep1C 2/1/2007 11:02:00 AM	RICH-RC-5016 REVISION 6
SC		HarveyK	Sep1C 2/2/2007 4:31:34 PM	RICH-RC-5065 REV5
SC		DAWKINSO	InCnt1 2/2/2007 4:43:36 PM	RICH-RD-0001 REVISION 3
SC		StringerR	CalcC 2/4/2007 12:50:20 PM	RICH-RD-0001 REVISION 3
AC		BockJ	2/1/2007 11:02:00	
AC		HarveyK	2/2/2007 4:31:34 PM	
AC		DAWKINSO	2/2/2007 4:43:36 PM	
AC		StringerR	2/4/2007 12:50:20 PM	
AC: Accepting Entry; SC: Status Change				
STL Richland				
Richland Wa.				
Page 1				
Grp Rec Cnt: 5				
ICOCFractions v4.8.26				

2/7/2007 8:04:08 AM

ICOC Fraction Transfer/Status Report

ByDate: 2/7/2006, 2/12/2007, Batch: '7026385', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7026385						
AC		CalcC	McDowellD	2/2/2007 11:23:21		
SC			andersonp	IsBatched	1/26/2007 4:36:25 PM	ICOC_RADCALC v4.8.26
SC			McDowellD	Sep1C	2/2/2007 11:23:21 AM	RICH-RC-5007 REVISION 6
SC			BlackCL	InCnt1	2/2/2007 11:26:05 AM	RICH-RD-0001 REVISION 3
SC			StringerR	CalcC	2/4/2007 12:09:35 PM	RICH-RD-0001 REVISION 3
AC			BlackCL	2/2/2007 11:26:05		
AC			StringerR	2/4/2007 12:09:35 PM		

AC: Accepting Entry; SC: Status Change

STL Richland
Richland Wa.

2/28/2007 4:15:37 PM

ICOC Fraction Transfer/Status Report

ByDate: 2/28/2006, 3/5/2007, Batch: '7026383', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting		Comments
7026383					
AC		Cnt1C	BockJ	2/1/2007 12:29:48 PM	
SC			andersonp	IsBatched 1/26/2007 4:49:02 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep 2/1/2007 12:29:48 PM	rich-rc-5016 rEVISION 6
SC			BockJ	Prep1C 2/1/2007 12:36:19 PM	RICH-RC-5015 REVISION 4
SC			AntonsonL	InPrep2 2/20/2007 11:32:42 AM	RICH-RC-5015 REVISION 4
SC			AshworthA	InPrep2 2/20/2007 11:33:03 AM	RICH-RC-5015 REVISION 4
SC			AshworthA	Prep2C 2/21/2007 2:17:22 PM	RICH-RC-5015 REVISION 4
SC			AntonsonL	Prep2C 2/21/2007 2:17:34 PM	RICH-RC-5015 REVISION 4
SC			NelsonT	Cnt1C 2/28/2007 2:54:46 PM	RICH-RC-5058 REV 7
AC			BockJ	2/1/2007 12:36:19 PM	
AC			AntonsonL	2/20/2007 11:32:42	
AC			AshworthA	2/20/2007 11:33:03	
AC			AshworthA	2/21/2007 2:17:22 PM	
AC			AntonsonL	2/21/2007 2:17:34 PM	
AC			NelsonT	2/28/2007 2:54:46 PM	

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.